

4. GRAVE DESCRIPTIONS AND SKELETAL ANALYSIS

4.1 Introduction

In this chapter each skeletal analysis and a brief description of burial style and burial goods are given where possible. The skeletons are described in order of their numbering at sites except the Toutswe-mogala skeletons, which have been given burial numbers in the order that they were analysed by the author. Additional information from some sites is given in brackets next to numerical burial numbers. Burials from Taukome and Thatswane were given numeric burial numbers. The burials were each identified by a feature given a numeric number that was not necessarily corresponding to the burial number because some of the features found were not burials (Denbow 1979b; 1983a). No attempts were made to decode the site labels of the Toutswe-mogala burials. Some of the burials from Toutswe-mogala were assessed by Murphy (1996) for bone pathology, dental health and stable isotopes but the skeletons used were not labeled and hence no attempts were made to identify them in the current study.

Descriptions of burial styles of individuals excavated by different archaeologists depend entirely on the amount of information provided by the archaeologists. The author provided no additional information whatsoever. Where applicable, burial goods are also described. Unfortunately, most of the burial styles are incomplete or unknown. In the case of Kgaswe B-55 burials, the locations of each individual was interpreted from the map of the site (Denbow 1986).

Skeletal descriptions include preservation condition, age estimate, sex, bone pathology, dental pathology, stature and a brief conclusion. Sections of sex determination and stature estimation are not included on infants, juveniles and subadults because no attempts were made to determine their sex and stature. For individuals whose teeth were missing, a dental description section was not made and if no bone lesions were found, a brief note was only made in the conclusion section.

Incomplete skeletons from which age and sex could not be determined are listed in Appendix 3a and 3b for Toutswe-mogala and Taukome cases respectively.

4.2 Toutswemogala Burials

Toutswemogala Burial 1 (Pot burial from 10R140 1st half level 2)

Burial style

The grave was excavated by Lepionka (Lepionka 1977), but unfortunately the exact burial style and provenance of this individual is unknown since no records containing the information were available. It is, however, possible that the individual had been buried in a clay pot as suggested by the mentioning of ‘pot burial’ on the label made at the site, and the possible age of the individual.

Although Lepionka’s report gives an account of the burial style and provenance of an infant buried in a pot (Lepionka 1977), it is difficult to verify which burial it is since De Villiers’ (1976) report mentions two pot burials of infants. One of these infants, 10R 3 (10R0) pot burial level 4, has been classified as incomplete burial 11 in this study.

Preservation

The cranial and postcranial remains are complete and well preserved.

Age

The alveoli of the mandible indicate that most of deciduous teeth were developed but not erupted. The two halves of the mandible are not fused. Since tooth germs are missing, age was determined from the lengths of long bones. The individual was probably a newborn or late fetus

Bone pathology

There are no signs of pathology on the skeleton.

Conclusion

The skeleton indicates that the burial was of a newborn baby or late fetus. There are no signs of pathology on this skeleton.

Toutswemogala Burial 2 (185 R350 level 1 burial 2)

Burial style

Lepionka excavated the burial in the 1970s (De Villiers 1976) but there are no records of its provenance and burial style. The skeleton has been examined by De Villiers (1976).

Preservation

De Villiers' record of this particular burial indicates that the postcranial remains were not submitted to her for analysis (De Villiers 1976). However, a bag containing a postcranial skeleton with the same site label as the cranium was found and it matched the cranium in terms of age. The cranium and postcranial skeleton have been put together as belonging to the same individual. The remains are well preserved and complete.

Age

All deciduous teeth are in occlusion and the first permanent molars had erupted, but were below occlusion. Crowns of permanent central incisors of the maxilla were well developed, but not erupted. The age was estimated at 6 ± 1 years old.

Bone pathology

There is evidence of cribra orbitalia on both orbits as well as porotic hyperostosis above the mastoids.

Teeth

There are eight deciduous maxillary and five deciduous mandibular teeth. They include maxillary lateral incisors, four canines, three first molars and four second molars. In addition to these, four permanent first molars are present. Maxillary central incisors, mandibular incisors and a mandibular right first molar are all missing postmortem. A small amount of calculus is present on the buccal surface of the maxillary right second molar and there is very little wear on the teeth.

Conclusion

The individual was a young child of between five and seven years old. Besides a small amount of calculus, there are no other signs of dental pathology. The child had cribra orbitalia as well as porotic hyperostosis.

Toutswemogala Burial 3 (10R135 burial bedrock north east)

Burial Style

The burial was excavated by Lepionka in 1970 (Lepionka 1977) and there are no records of the burial style and provenance of this individual. The skeleton has been previously examined by De Villiers (1976).

Preservation

The skeleton is incomplete and was poorly preserved. Most of the left side of the cranium and mandible are missing and postcranial bones are fragmented.

Age

The individual's dentition is mixed. Deciduous canines and molars are present in both the maxilla and the mandible. First permanent molars are in occlusion and so are the central incisors. In the mandible, the lateral incisors had erupted. Age was estimated to be six to eight years old.

Bone pathology

The right orbit is complete and has evidence for mild cribra orbitalia.

Teeth

A total of 23 mixed teeth (12 maxillary and 11 mandibular) were examined. Maxillary teeth present include deciduous lateral incisors, canines, first and second molars as well as permanent central incisors and first molars. Mandibular deciduous teeth are canines and all four molars and all four permanent incisors and a right first molar. There is little dental wear on the deciduous teeth. The mandibular right canine has pitting enamel hypoplasia.

Conclusion

The skeleton is that of a child between six and eight years old with evidence of cribra orbitalia and pitting enamel hypoplasia.

Toutswemogala Burial 4 (5R135 1st half burial at bedrock, isolated skull, north end)

Burial Style

The current burial number is consistent with Lepionka's (1977) numbering. It was one of the two burials found from underneath a deteriorated floor, next to a stonewall on the eastern side of the site (Lepionka 1977). It was difficult to determine whether the grave had been dug through the floor or not, since the floor itself had been eroded in some parts. The grave was of a skull buried in isolation, presumably for ritual purposes (Lepionka 1977).

Two burials of isolated skulls of immature individuals were found during excavation (burials 4 and 16 in this report). It was therefore not clear which of the two

burials Lepionka referred to as Burial 4 since his report follows a different labeling system from the site labels found with the skeletons. The key feature was De Villiers' description of the skull as having San paedomorphic characteristics (De Villiers 1976, Lepionka 1978). The description is consistent with the skull labeled Burial 4 in the current study.

Preservation

The mandible is currently missing, but it was present at the time of excavation. De Villiers' description of the mandible (De Villiers 1976) was used to try to identify the mandible from those that had been placed in the same bag but none of them fitted the description. The remains comprise of a complete and well-preserved skull.

Age

The dentition is mixed and consists of maxillary deciduous first and second molars and permanent first molars. Anterior teeth were lost post mortem. Age of this individual was estimated to be 7 ± 1 years.

Bone pathology

A round hole is present on the left parietal bone. Its external margin is sharp and it has internal beveling, and could have been a result of trauma or a post depositional occurrence. A more detailed description of this hole is presented in chapter 6.

Teeth

Only six teeth were available for assessment of dental pathology. Large dentine patches are exposed but still surrounded by enamel on all four deciduous molars, whereas the first permanent molars are slightly polished.

Conclusion

The child was between six and eight years old. A round hole on the left side of the skull has been identified as a possible case of trauma.

Burial Style

Toutswemogala Burial 5 (Burial 3 10 R150)

Burial style

Lepionka excavated this burial (Lepionka 1977; 1978), but records of the burial style are currently not available and its provenance is unknown.

Preservation

The skeleton is not well preserved and is incomplete. De Villiers' report on this burial shows that there were no cranial remains and teeth (De Villiers 1976), whereas the current examination included a fragmented skull and mandible and some teeth. The few bones present are fragmented and the skull is badly damaged. There are no facial bones.

Age

Though some of the teeth had been lost, it is evident that all deciduous teeth were in occlusion and that the first permanent molars had not erupted. Partially complete crowns of permanent maxillary central incisors and permanent canines are present. Elements of the occipital bone are not fused. On the basis of the few teeth found and the occipital bones, age of this individual was estimated to be 4 ± 1 years old.

Bone pathology

The little that remains of this skeleton has no signs of bone pathology.

Teeth

There were six deciduous maxillary and five mandibular teeth examined. Maxillary teeth found include central incisors, the right canine and first molar and both second molars. On the mandible, a left central incisor, lateral incisors, right canine and second molar were present. There is no evidence for dental pathology or dental wear on this individual.

Conclusion

The remains are of an infant of three to five years old. The skeleton displays no signs of pathology.

Bone pathology

Toutswemogala Burial 6 (5R135 1st half burial, bedrock south end)

Burial Style

The grave was found in the 'middle area' of the site in square 10,15S (135E) 1015S (140E) (Lepionka 1977; 1978), about 6cm below a floor. The body had been horizontally flexed and was laid on its left side. A large flat stone had been placed over the pelvis. From the site map (Lepionka 1977; 1978), it is evident that the head had been oriented to the west and was facing a stonewall located on the eastern side of the site.

The burial number is consistent with Lepionka (1977; 1978). From the picture in Lepionka's (1977; 1978) report, the cranium has a well-pronounced occipital protuberance and two holes on the right parietal bone. The shapes of these holes and the occipital protuberance are similar to those identified on '5 R135 1st half burial, bedrock south end'. The skull had been stored in a box containing several other skulls without proper labeling. Its identification to this site label was based on the photos published in Lepionka and De Villiers' reports (De Villiers 1976; Lepionka 1977; 1978).

Burial goods

A bowl with a constricted neck was found next to the knees of this individual (Lepionka 1977; 1978). The bowl appears to have been complete and intact at the time of excavation. Attempts to find this bowl during this research were futile since it had been separated from the skeleton when stored.

Preservation

De Villiers' account of this burial stipulates that the postcranial skeleton was not present (De Villiers 1976), but a nearly complete set of postcranial remains with the same label as the skull were found and taken to be the same individual in the current study. Lepionka's report also indicates that this burial was complete (Lepionka 1977). The skeleton is nearly complete and is in good condition.

Age

The dentition is mixed. The maxillary deciduous right second molar is loose from the alveolus and its left counterpart is in place. The mandibular right deciduous first molar is still in place. First premolars and first permanent molars are in occlusion and thereby providing an age estimate of 10 ± 1 years old.

Bone pathology

Spina bifida occulta has been identified on the axis. A rounded hole with sharp external margins and internal beveling is present on the cranium. A more detailed description of the hole is made in chapter 6.

Teeth

A total of 22 teeth, eight maxillary and 14 mandibular, are present. Of these, three are deciduous second molars. A carious lesion is present on the maxillary right deciduous second molar. Pitting enamel hypoplasia is present on the mandibular central incisors

while the mandibular canines have enamel hypoplastic lines. Advanced wear is noted on the mandibular deciduous second molars, the rest of the teeth are not worn.

Conclusion

The remains are of a child of between nine and 11 years old with a carious tooth and advanced dental wear. The child had a cleft neural arch of the axis and a possible traumatic lesion has been identified on its skull.

Toutswemogala Burial 8 (270 R360 level 1 burial)

Toutswemogala Burial 7 (270 R360 level 1 burial 2)

Burial style

Three individuals from the same box bearing the same site label were identified by De Villiers (1976). The skeleton described here is the third of these individuals as identified by De Villiers (1976). Lepionka excavated the grave and De Villiers examined the skeleton (De Villiers 1976; Lepionka 1977). Unfortunately there are no records of its burial style and provenance but some burial goods have been found in association with this skeleton. The second of these individuals has been labeled incomplete burial 12 in this study.

Burial Goods

An incomplete and fragmented metal artifact that appears to have been a bracelet was found in the box that contained the skeleton.

Preservation

The remains are well preserved and are nearly complete.

Age

All deciduous teeth are in occlusion and the permanent first molars are not erupted. The maxillary permanent central incisor crown is complete whereas crowns of permanent premolars and lateral incisors are incomplete. The basilar part of the occipital bone is not fused. Age has been estimated to 4 ± 1 years old.

Bone pathology

Assessment for bone pathology revealed no skeletal lesions.

Teeth

A total of 11 deciduous teeth (seven maxillary and four mandibular) are present. On the maxilla the right incisors and canine are missing postmortem. On the mandible all anterior teeth are missing postmortem. Maxillary incisors have small patches of dentine

exposed by dental wear, and there is no other evidence for dental pathology on all teeth examined. The individual had good dental health.

Conclusion

The skeleton is of a juvenile of between three and five years old. No pathological lesions were observed.

Toutswemogala Burial 8 (125R185 level 1 burial)

Burial style

This burial was excavated by Lepionka and has been previously examined by De Villiers (Lepionka 1977, De Villiers 1976). There is no information regarding its burial style and provenance.

Preservation

The skull is fragmentary and the postcranial skeleton is incomplete and is poorly preserved.

Age

Most of the teeth are fragmented and incomplete and this hinders age estimation. The basilar and lateral parts of the occipital bone are not fused and long bone lengths suggest an age estimate of two to four years.

Bone pathology

The left temporal bone has porotic hyperostosis.

Teeth

Most of the teeth are fragmented and incomplete and were not measurable. Those that were possible to identify included two mandibular incisors, two mandibular molars and 3 maxillary molars all of which are deciduous. There are also three incomplete crowns of permanent molars. No signs of dental pathology were found on those teeth that were possible to identify.

Conclusion

The remains are of a child of approximately two to four years. The individual has evidence of porotic hyperostosis.

*Toutswemogala Burial 9 (185 R350 level 1 burial 1)**Burial style*

The burial was excavated by Lepionka and has been previously examined by De Villiers (De Villiers 1976; Lepionka 1977). Unfortunately there is no information regarding the burial style and provenance of the grave. The mandible had been stored in a box containing several other mandibles (of Burials 26-30) and it was identified by De Villiers' description of a left canine with a bifid root (De Villiers 1976).

Burial Goods

A wound metal ornament, presumably a bracelet and a copper bead were found in the bag containing the skeleton. The bracelet is fragmented and rusty and it appears to have been made from iron. The copper bead is complete and had turned bluish in color. Unfortunately, these artifacts are not mentioned in the literature and information regarding their exact location in relation to the skeleton is unknown.

Preservation

The calvarium is nearly complete but most of the face is missing; the mandible is complete and well preserved. The postcranial skeleton is fairly complete and well preserved. A small puncture mark was identified on the internal surface of the left mandibular angle and it appears to have resulted from post depositional processes.

Age

The lateral parts of the occipital are fused to the squama but not to the basilar part. Mandibular permanent first molars and central incisors are in occlusion along side deciduous lateral incisors, canines, first and second molars. The individual is estimated to have been about seven to nine years old.

Bone pathology

The left orbit is missing and the right orbit has evidence for cribra orbitalia.

Teeth

All maxillary teeth are missing. The left mandibular canine has a bifid root, a condition previously observed by De Villiers (1976). Other roots are not observable as they are still inside the alveoli. Small patches of dentine are exposed on deciduous lateral incisors, canines and molars. All permanent teeth are not worn. A thin enamel hypoplastic line is present on the permanent central incisors.

Conclusion

The skeleton is of a child aged between seven and nine years old. The individual has evidence for cribra orbitalia as well as an enamel hypoplastic lesion on an incisor.

Toutswemogala Burial 10 (20 R3 (20R0) level 4 burial)

Burial style

The burial was excavated by Lepionka and has previously been examined by De Villiers (De Villiers 1976; Lepionka 1977). There is no information regarding its burial style and provenance.

Preservation

The cranium and mandible are fragmentary and incomplete. However, the postcranial skeleton is nearly complete and is well preserved. Most long bones are intact.

Age

Most of the teeth are missing but the alveoli indicate that they had been present at the time of death. In the maxilla, the deciduous right canine and deciduous second molars had not erupted, whereas the deciduous first molars had erupted. Mandibular deciduous first molars had erupted. An incomplete crown of a permanent first molar is present. Age was estimated to be 18 ± 6 months.

Bone pathology

There are no indications of pathological lesions on any of the bones present.

Conclusion

The skeleton is that of an infant of between one and two years old.

Bone pathology

Toutswemogala Burial 11 (5R135 1st half burial bedrock)

Burial style

The burial was excavated by Lepionka and the remains have been assessed before by De Villiers (De Villiers 1976; Lepionka 1977). There is no available information regarding its provenance and burial style.

Preservation

The cranium and mandible are missing but the postcranial skeleton is complete and well preserved.

Age estimation

In the absence of the cranium and consequently also the teeth, age of this infant was determined from lengths of long bones and was estimated to have been zero to six months.

Bone pathology

There are no signs of pathology on the bones.

Conclusion

The remains are of an infant of between newborn and six months old with no indications of skeletal lesions.

Toutswemogala Burial 12 (15R0 burial inside of trench)

Burial style

This burial was excavated by Lepionka and has been examined by De Villiers (De Villiers 1976; Lepionka 1977; 1978). Unfortunately, there is no data regarding its provenance and burial style.

Preservation

The skeleton is incomplete and poorly preserved. The cranium and mandible are fragmented and a fragment of a tibia is the only long bone present.

Age

There are incomplete crowns of deciduous molars and the two halves of the mandible are not fused. Neural arches are not fused to each other. The age of this infant is estimated to have been approximately zero to six months.

Bone pathology

The skeleton has no indications of pathology.

Conclusion

The skeletal remains are of an infant of zero to six months old.

Toutswemogala Burial 13 (270R360 level 1 burial 3)

Burial style

Lepionka excavated the burial and De Villiers examined the skeleton (De Villiers 1976; Lepionka 1977; 1978). Unfortunately, there is no information regarding its provenance and burial style.

Preservation

The cranium is partially complete and the mandible is currently missing but it was present at the time of excavation (De Villiers 1976). Postcranial remains of the individual are in a fairly good condition.

Age

All components of the occipital bone are fused. Although most of the teeth are missing, a maxillary deciduous first molar and a permanent first molar were in use at the time of death. Age is estimated to be between seven and nine years old.

Bone pathology

There are no lesions associated with pathological conditions.

Conclusion

The remains are of a child of between seven and nine years old.

*Toutswemogala Burial 14 (10R140 2nd half level 2 burial)**Burial style*

Information regarding the burial style and provenance of this burial is not available. This burial was excavated by Lepionka and has been examined by De Villiers (De Villiers 1976; Lepionka 1977; 1978).

Preservation

The cranium is damaged and distorted on the right side in the parietal/frontal region. However, the rest of it is intact and in good condition. The mandible and the rest of the postcranial bones are complete and in excellent condition.

Age

The dentition of the individual is mixed. Deciduous canines and molars were in use and so were the first permanent molars. Maxillary permanent lateral incisors were not erupted and even though the permanent central incisors are missing, their sockets indicate that they had erupted. Age was estimated to have been 6 ± 1 years old.

Bone pathology

The right femur has evidence of healed trauma.

Teeth

The assessment included a total of 16 teeth (four deciduous canines, eight deciduous molars and four permanent first molars). There is only minimal dental wear on the deciduous teeth.

Conclusion

The remains are of a child aged between five and seven years. The child had experienced some trauma on the left femur, which had healed before the time of death.

Toutswemogala Burial 15

Burial style

The site label of this burial is missing and it is not clear whether or not De Villiers examined the skeleton. Its burial style and provenance are consequently unknown. It was excavated by Lepionka (Lepionka 1977).

Preservation

The skeleton is well preserved but is missing the cranium and mandible.

Age

None of the epiphyses are fused and in the absence of dentition, age could only be estimated on the basis of long bone lengths. Age of this individual is estimated to be seven to 10 years old.

Bone pathology

The skeleton shows no signs of pathology.

Conclusion

The remains are of a child of between seven and 10 years old.

Toutswemogala Burial 16 (10R135 burial 2, southwest corner, bedrock)

Burial style

The burial comprises of an isolated skull, which was excavated by Lepionka. It was included in the sample studied by De Villiers (De Villiers 1976; Lepionka 1977).

Preservation

The skull is fractured and is incomplete but the mandible is complete and well preserved.

Age

Most permanent teeth are in occlusion. Maxillary permanent second molars are below occlusion and the third molars are developed but not erupted. Age is estimated to be 11 ± 1 years old.

Bone pathology

There is well-developed cribra orbitalia in both orbits.

Teeth

A total of 26 out of 32 permanent teeth were assessed. The maxillary left lateral incisor is partially damaged and the mandibular right first premolar is missing. On the maxillary dentition, there are small carious lesions on both central incisors and these are located between the two teeth (interproximally). Medium sized deposits of calculus are present on the labial and lingual surfaces of mandibular incisors. Large dentine is exposed but still surrounded by enamel on maxillary central incisors. Possible dental mutilation of the maxillary central incisors was noted.

Conclusion

The skull is of an older child of between 10 and 12 years old. The individual had well developed cribra orbitalia. A possible dental modification of maxillary central incisors has been identified.

*Toutswemogala Burial 17 (270 R360 level 1 burial 1)**Burial style*

Lepionka excavated the skeleton and De Villiers examined it in the 1970s (De Villiers 1976; Lepionka 1977). There is no information regarding its burial style and provenance.

Preservation

The remains are poorly preserved, fragmented and incomplete.

Age

All permanent teeth are in occlusion except for the third molars, which had not yet erupted. None of the epiphyses are fused. Age is estimated at 10 - 12 years.

Bone pathology

There are no skeletal lesions on this individual.

Teeth (Toutswe Mogala Burial 19 (Burial 125-R330 Level 1))

A total of 25 teeth, 12 maxillary and 13 mandibular, were present. The individual's maxillary lateral incisors are peg-shaped. Both maxillary second molars and a mandibular left central incisor have been lost post mortem. No dental pathologies are evident besides small dentine patches exposed on the maxillary central incisors and mandibular central and lateral incisors on the right side. A very small amount of calculus is present on the labial surface of the mandibular right lateral incisor.

Conclusion

The burial was of an individual aged between 10 and 14 years, with no indications of bone and dental pathology.

Toutswe Mogala Burial 18 (3R 150 (OR150) burial 2 level 3)

Burial style

The burial was excavated by Lepionka (Lepionka 1977) but unlike the others, it appears to have been excluded from the study done by De Villiers. The burial style and provenance of the grave are not known.

Preservation

The remains are poorly preserved and incomplete. Several small fragments represent the cranium, and the mandible is incomplete.

Age

In the mandible, the left deciduous molars are in occlusion and the first permanent molar had not erupted. A maxillary deciduous central incisor, first molar and two second molars are also present. Dental development suggests an age of 4 ± 1 years.

Bone pathology

There are no skeletal lesions associated with pathology.

Conclusion

The skeleton is of a juvenile aged between three and five years. There is no evidence for bone and dental pathology on this child.

Toutswemogala Burial 19 (Burial 125 R330 Level 1)

Burial style

Lepionka excavated this burial and it has been examined by De Villiers (De Villiers 1976). There is no information regarding the burial style of this individual and the provenance of the grave.

Preservation

The cranium is incomplete and the mandible is missing, although it was present at the time of excavation (De Villiers 1976). Some elements of this skeleton were stored at a completely different location from the rest of it. An incomplete skull, nearly complete vertebral column and some fragments of the pelvic girdle were found in a different box. They fit the description given by De Villiers (1976), which was used to identify the rest of the skeleton. The skeleton is fragmented but nearly complete and is mixed with fragments of animal bones. Both human and animal bones show varying degrees of exposure to fire (De Villiers 1976). Some of the bones are whitened while others are charred black.

Age

Age was determined from the sternal ends of ribs and they place the individual between 40 and 60 years old.

Sex

An incomplete os coxa shows a narrow sciatic notch and measurement of the diameter of the head of femur (50.61mm) indicates a male individual. In addition, the mastoids are large.

Stature

None of the long bones were complete and therefore it was not possible to calculate stature.

Bone pathology

Shafts of both femora and tibiae and some phalanges from the feet have been severely burnt and are charred. Fragments of the pelvic girdle, the head of the right femur and fragments of the distal ulnae are also burnt but not charred. Association with burnt animal bones suggests that the bones may have been burnt alongside pieces of animal flesh. The little that remains of the cranium does not have evidence of burning. Possible causes of these burnt bones include veld fires, which may have occurred after burial.

There are small osteophytes on some of the vertebrae and on the distal extremity of the left tibia a small bone growth was identified.

Conclusion

The remains are of an adult male aged between 40 and 60 years. It was not possible to estimate the individual's stature. The bones were burnt. Unfortunately the individual's teeth were not preserved and thus its dental health status is unknown.

Toutswemogala Burial 20 (10R135 Burial S)

Burial style

Lepionka excavated the burial and it has previously been examined by De Villiers (1976). Like most of the Toutswemogala burials, there is no information regarding the burial style and provenance of the grave.

Preservation

The remains comprise of a nearly complete skull with no facial bones, and a complete mandible. The postcranial skeleton is missing.

Age

All deciduous teeth are in occlusion and permanent molars are developed but not erupted. Components of the occipital bone are not yet fused. Age is estimated at 4 ± 1 years.

Bone pathology

The skull has no indications for pathology.

Teeth

All 10 deciduous mandibular teeth are present and they do not have any indications of dental pathology. All maxillary teeth are missing.

Conclusion

The individual was a juvenile of three to five years. No indications of pathology were found on teeth and bones. an estimate of this individual's age. However, extensive vertebral pathology indicates an older individual of approximately 40 to 50 years.

Toutswemogala Burial 21 (Burial 1 No 8 square)

Burial style

The burial was found by Lepionka in 1970 (Lepionka 1977) but a skeletal report produced by De Villiers (1976) does not make reference to this individual. It is possible

that it was not sent to De Villiers for analysis. Its burial style and provenance are unknown.

Preservation

The cranium and mandible are fragmented and distorted. The skeleton is generally incomplete and fragmented and was poorly preserved. There are gnaw marks on the mandible and on some long bone fragments, indicating that burrowing animals had disturbed the grave.

Age

All deciduous central incisors and first molars had erupted. It appears that the maxillary lateral incisors had not erupted. Canines had not erupted. Based on dental development, the infant was estimated to be 12 to 18 months old.

Bone pathology

There are no signs of bone pathology found.

Conclusion

Although the skeleton is incomplete, it was possible to estimate its age to between 12 and 18 months old.

Toutswemogala Burial 22 (15 R135 Burial)

Burial style

The burial was unearthed in the 1970s by Lepionka and it has been examined by De Villiers (De Villiers 1976). Its burial style and provenance are unknown.

Preservation

The cranium and mandible were present (De Villiers 1976) but are currently missing. The postcranial skeleton is partially complete.

Age

Unfortunately, neither sternal ends of ribs nor cranial sutures were preserved. It was therefore not easy to make an estimate of this individual's age. However, extensive vertebral pathology indicates an older individual of approximately 40 to 50 years.

Sex

The mandible and most bones of the pelvic girdle are missing. The maximum diameters of the heads of the humerus (44.7 mm) and the femur (46.4mm) both fall within the range for South African black males.

Stature

Stature of this individual was estimated from a combination of the physiological lengths of the femur and tibia. Results indicate that the individual was approximately 172 ± 2.56 cm in height.

Bone pathology

Osteophytes are visible around articular surfaces of the knee joint including the patella, and on most of the vertebrae. Four continuous lumbar vertebrae, between L2 and L5, are fused. The sacroiliac joint has not been preserved but based on the involvement of the lumbar vertebrae ankylosing spondylitis could have caused the condition.

Conclusion

The remains are of an adult male approximately 40 to 60 years old, and 172 ± 2.56 cm in height. Bones indicate that the individual had suffered from degenerative diseases affecting the knee and the vertebrae.

*Toutswemogala Burial 23**Burial Style*

The site label of this individual is missing and it is therefore uncertain whether De Villiers has examined the remains. The grave was found by Lepionka (1977; 1978). Its burial style and provenance remain unknown.

Preservation

The cranium and mandible are fragmented and distorted but the postcranial skeleton is nearly complete and well preserved.

Age

Most of the deciduous tooth crowns have been lost but a central incisor and a first molar are present and were not fully developed at the time death. Neural arches are not fused. The maximum length of the femur was also used to estimate its age. The remains are of a newborn/ fetus.

Bone pathology

The skeleton has no pathological lesions.

Conclusion

The remains are of a fetal/ newborn baby.

*Toutswemogala Burial 24 (10R3 (10R01) Burial 1 sublevel 1)**Burial style*

The skeleton was found during excavations conducted by Lepionka in 1970 and was examined by De Villiers (De Villiers 1976). Its provenance and burial style are not known. Two individuals from the same box were identified (De Villiers 1976) and the current burial number refers to the second one described by De Villiers. The first one has been classified as incomplete burial 1 in this report.

Preservation

The skeleton is incomplete and fragmentary.

Age

Teeth were not preserved and age was estimated from the length of the humerus, which indicates an age of approximately three to five years old.

Bone pathology

There are no indications for pathology.

Conclusion

The skeleton is of an infant of about three to five years old.

*Toutswemogala Burial 25 (Toutswe Woman)**Burial style*

The grave was excavated in the 1970s by Lepionka (1977; 1978). The burial had been reconstructed and was on display at the BNMMAG. Shortly before the beginning of this research, the display was photographed and removed. The skeleton was then made available to the author for analysis.

The description below is based on the museum display. The individual had been buried in flexed position and was on the left side (Figure 4.1). Its head was oriented to the west. The right elbow was on top of the right femur and both hands were underneath the head. Unfortunately there are no records indicating the provenance of the grave associated with this skeleton. The skeleton has become popularly known as the 'Toutswe woman'.

It appears highly likely that the skeleton was not sent to De Villiers for examination because in her report she identified only three adults, two complete and one

isolated fragment. All three have been found and none of them fit the description of this individual.

Burial goods

A complete and intact clay pot was found between the head and the knees (the legs were flexed). The pot has a constricted and long neck and its opening faced upwards. The body of this pot was decorated with incised triangles filled with incised lines. A complete and intact bowl had been placed just below the knees with its opening tilted slightly downwards. Next to the bowl, a large beaker was laid with its mouth towards the pelvis. Both the beaker and the bowl have no decorations. Other large fragments of pottery were found in association with this burial.

Preservation

The skeleton is well preserved but its entire left side is missing. A brief and informal interview with one of the museum personnel who was involved in the Toutswemogala excavations in the 1970s revealed that none of the bones of this individual were separated from it at the time of making the display.

Age

The sphenoccipitalis is closed. Rib phase analysis suggests an adult of 30-50 years old.

Sex

The sciatic notch is wide and a preauricular sulcus is present. The individual was a female.

Stature

This female's stature was calculated from a combination of the physiological lengths of the femur and the tibia. An estimate of 170 ± 2.56 cm was obtained.

Bone pathology

Osteophytes had developed around the distal articular surfaces of the femur but are not present on the superior articular surface of the tibia. There are no other signs of bone pathology.

Teeth

The maxillary central incisors are missing postmortem and the rest of both maxillary and mandibular teeth are present. Dental wear ranges between exposure of

medium sized patches of dentine to large dentine patches showing, but still surrounded by enamel in all teeth except third molars which are not worn.

Conclusion

The remains are of an adult female aged between 30 and 50 years whose stature was approximately 167 to 173 cm. She had suffered from some kind of degenerative condition that had affected her knee joint.

The individual's age is estimated to have been 18 ± 6 months old

Teeth

Figure 4.1 Reconstructed grave of Toutsweogala Burial 25 (Photo courtesy of BNMMAG)



Toutsweogala Burial 26

Burial style

Only the mandible is present. It is not clear whether this was an isolated find or whether the rest of the skeleton has been misplaced. Its provenance is unknown. Lepionka (1977; 1978) excavated the remains but it is not certain whether De Villiers examined them or not, since no site label was found. Moreover, the mandible has no special features that could be used to correlate it to any of the ones described by De Villiers. The mandible does not fit any of the skulls found without a mandible.

Preservation

A complete mandible represents this individual and the rest of the skeleton is missing. The mandible itself is well preserved.

Age

Deciduous incisors and first molars are in occlusion; canines and second molars are all below occlusion. Crowns of first permanent molars are present inside the alveoli. The individual's age is estimated to have been 18 ± 6 months old.

Teeth

Deciduous incisors, canines and first molars were examined for pathology. The right central incisor is missing postmortem. Pitting enamel hypoplasia was noted on the right canine.

Conclusion

The mandible is of an infant of approximately one to two years old. Assessment for bone pathology could not be carried out, as only the mandible is present. Its right canine has evidence for enamel hypoplasia.

*Toutswemogala Burial 27**Burial style*

This is another individual represented by a mandible only. It was excavated by Lepionka (1977; 1978) and due to lack of a site label it is not clear whether the remains were sent to De Villiers for examination in the past. Its burial style and provenance are unknown. It does not fit any of the skulls found without a mandible.

Preservation

An incomplete mandible and a fragment of the right ulna and other unidentified fragments are the only pieces present.

Age

Only the left half of the mandible is present and it indicates that the two halves of the mandible were not fused. Only one deciduous crown was preserved and the mandible indicates that most of the deciduous teeth had developed. The infant's age is estimated to be between zero and six months old.

Conclusion

The remains comprise of the left half of a mandible of an infant of zero to six months old.

Toutswemogala Burial 28 (5R150 Level 3)

Burial style

There are no records indicating the burial style and provenance of this burial. In addition, it is not clear whether or not this was a complete or isolated find. Lepionka excavated the skeleton. De Villiers' record (1976) reveals that two individuals both bearing the same site label were identified. The first of these identified by De Villiers is the one referred to as Toutswemogala Burial 28 in this report. The second individual was not found.

Preservation

The remains comprise of an incomplete left side of the body of the mandible only.

Age

The deciduous left molars and a maxillary second molar are in occlusion. Crowns of the left permanent lateral incisor and first molar are visible inside their sockets. These teeth give an age estimate of 3 ± 1 years.

Teeth

No signs of dental pathology were found.

Conclusion

The mandible belonged to an infant of approximately two to four years old.

Toutswemogala Burial 29

Burial style

There are no site records or subsequent reports indicating the provenance and burial style of this individual. It was excavated by Lepionka (1977; 1978) but since no site records associated with this individual were found, it is difficult to tell if De Villiers examined it or not. The remains have no specific features that could be used to identify it on De Villiers' (1976) report. The mandible does not fit any of the skulls identified without a mandible.

Preservation

The remains include an incomplete mandible, a few maxillary teeth and some unidentified fragments of the skull.

Age

A permanent maxillary canine and second molar, a mandibular canine, first and second molars, and a central incisor were recovered. A third molar crown was also found. None of them has complete roots. The individual was approximately six to 10 years old.

Teeth

Enamel hypoplastic lines were noted on a maxillary canine.

Conclusion

The mandible belonged to a child of between six and 10 years old.

Age

Toutswemogala Burial 30 (255 R360 Burial 1 Level) of the ultra and was about 10

Burial style

This burial was excavated by Lepionka (1977) but there is no data to reveal whether or not this was an isolated find, or its provenance. De Villiers' report (1976) has no individual bearing this site label, and it has not been studied before.

Preservation

This individual is represented by the right side of the body of the mandible, an incomplete maxilla, fragments of the frontal, right temporal, right parietal and zygomatic bone.

Age

Most of the tooth crowns have been broken, but their roots are still in their sockets. Age was thus difficult to estimate since most of the teeth had been broken and the mandible itself is not complete enough to show whether third molars had erupted or not. Nevertheless, premolars and molars appear to have been in occlusion and show slight wear. The individual was possibly a young adult of 20 - 40 years.

Teeth

Almost all teeth have been broken and thereby making it impossible to assess the dental health of this individual.

brown midden soil into the unburned dung of level VII below. The burial therefore post-dates the lower level. The burial was oriented with its head to the west and was lying in a flexed position on its left

Conclusion

The remains are of a mature individual of approximately 20 and 40 years old whose sex could not be determined.

Preservation

Toutswemogala Burial 31 (270 R360 level 1 burial 2)

Burial style

The burial was excavated by Lepionka in the early 1970s (De Villiers 1976; Lepionka 1977) but there are no records indicating its location on the site. It has been studied by De Villiers before (1976).

Preservation

The cranium and mandible are missing and the postcranial skeleton is fragmented.

Age

Age of this individual was estimated from the length of the ulna and was about 10 ± 1 years old.

Conclusion

The skeleton is of a child of between nine and 11 years old. The skeleton shows no signs of pathology.

4.3. Taukome Burials

Taukome Burial 1 (Feature 1)

Burial Style

This grave was excavated by Denbow in the late 1970s (Denbow 1979b; 1983a). Murphy (1996) included this individual when doing stable isotope analysis. The burial was found in Feature 1, which was about 65 cm below the surface on the northeastern corner of unit 2 in the brown silt manure (Denbow 1979b). It was marked by a concentration of stones. The bones were in a poor condition and some molars were found in a rodent burrow in the center of the square. Denbow (1983a: p113) gave the following description:

“ The stones overlay the burial of an adult male. The burial shaft had been dug through the overlying brown midden soil into the unburned dung of level VII below. The burial therefore post-dates the lower kraal. The burial was oriented with its head to the west and was lying in a flexed position on its left

side. The left hand was between the legs and the right arm was placed across the stomach. A rodent burrow was found just below the burial and the left tibia was missing. No grave goods were associated”.

Preservation

The skeleton is incomplete but the bones present are in good condition. It is possible that the cranium and other missing bones could have been misplaced during storage, or after Murphy's (1996) analysis, as there is evidence that the skeleton was nearly complete at the time of excavation.

Age

Permanent teeth are severely worn suggesting long-term use. Ribs are at phase six and therefore the age is estimated to be 40 to 60 years old.

Sex

The individual was a male, as indicated by a narrow sciatic notch and a long and narrow sacrum. The skeleton is robust with evidence of strong muscle attachments especially on the ulnae.

Stature

Lower limb bones were not preserved hence stature of this individual was estimated from the length of the humerus. He was approximately 166 ± 4.46 cm tall.

Bone pathology

Osteophytosis around the articular surface of the body of S1 indicates that some degenerative disease affected this joint.

Teeth

A total of 30 permanent teeth (15 maxillary and 15 mandibular) were examined for dental pathology. The left maxillary first molar and the left mandibular central incisor have been lost after burial. On the maxilla, there is advanced dental caries on the buccal surface of the left third molar where more than half of this tooth is destroyed. Dental abscesses were also noted on the lingual surfaces of the left canine and first premolar. The alveoli bone around these teeth is eroded. Smaller abscess lesions are located on the buccal surfaces of the right first and second premolar. There is advanced dental wear with only roots remaining on the central incisors. Mandibular teeth have large dentine patches exposed but were still surrounded by enamel.

Conclusion

The remains are of an adult male aged between 40 and 60 years of about 161 to 171 cm in height. The individual has evidence for one of the arthritic diseases affecting the vertebral column. Some carious lesions as well as abscessing and dental wear on the teeth of this individual suggest poor dental health.

Taukome Burial 2 (Feature 3)

Burial style

Denbow excavated this burial in the late 1970s and the skeleton has been analysed by Murphy (1996) before. This burial came from underneath Feature 3 in unit 4 (18.30-19.10N; 3.30-4.10W), which was essentially a circular area containing pebbles and pieces of unburned dung (Denbow 1979b, 1983a). The feature was approximately 1.2 m in diameter and was 45 cm below the surface of Unit 4. The individual was tightly flexed and placed on its left side. The right arm was bent over the chest while the left arm was underneath the body (Denbow 1979b, 1983a). The skeleton was approximately 95 cm below the surface, just above cattle dung deposit. Two large stones had been placed near the knees.

Burial goods

From the grave fill, four small (2 x 3 mm) dark blue cane glass beads were found in the grave fill (Denbow 1983a). Their association to the grave was uncertain.

Preservation

A large open burrow was found just below the mid section of this burial and rodents may have removed some of the bones (Denbow 1979b). The cranium, right ribs, hands, feet and the lumbar vertebrae were missing.

Age

Epiphyseal lines are obliterated and permanent teeth are worn. Rib phase analysis used to estimate the age of this individual suggests an age of between 40 and 60 years old.

Sex

The individual has a small acetabulum, a wide sciatic notch and a short and broad sacrum. These features are indicative of a female.

Stature

Stature of this individual could not be estimated because no complete long bones were found.

Bone pathology

The mandible is deformed due to tooth loss. There are arthritic changes on the posterior surface of the proximal end of the right humerus. Osteophytes are present on the cervical vertebrae and around the articular surface of the first sacral vertebra.

Teeth

Only eight mandibular teeth were found. The left second and third molars and the right first and third molars were lost before death and their alveoli had closed and healed. Left incisors and the canines were lost postmortem. The anterior teeth are slightly worn but posterior teeth are severely worn. The distal half of the right second molar has been destroyed by severe dental caries.

Conclusion

The skeleton belonged to an adult female aged between 40 and 60 years. Skeletal lesions found on this female suggest that she had been affected by some degenerative arthritic condition. In addition, the individual had poor dental health as indicated by a large carious lesion and antemortem loss of three mandibular molars.

Taukome Burial 3 (Feature 4)

Burial Style

Denbow unearthed the grave and was analysed by Murphy but did not produce stable isotope material (Murphy 1996). The grave was identified as feature 4 in Unit 6 (18-21N; 6-9W). This feature was near the western side of this unit. Remains of an individual were found inside one of the pots. The burial pot was still intact at the time of excavation. The infant was well articulated when found (Denbow 1979b) and therefore this was not a secondary burial.

Burial goods

Six pots placed on top of stones were found in association with this burial, with one of them containing the skeleton. The form and motif of decorations on these pots indicate that they were of the Toutswe type (Denbow 1979b; 1983a). Unfortunately the pots had been broken at the time of excavation.

Preservation (Photo courtesy of Jk Denbow)

The skeleton is complete and well preserved.

Age

Neural arches are not fused and so are the two halves of the mandible.

Development of crowns of deciduous teeth indicates an age of zero to six months.

Bone pathology

There are no indications of bone pathology on the remains.

Conclusion

The burial is of a newborn baby aged between zero and six months, found buried in clay pot. There are no indications of skeletal lesions.

Taukome Burial 4 (Feature 5)

Burial style

The burial was found next to the south wall of Unit 6 (18N; 6.77-7.10W), about 70 cm below surface. The individual was lying on its right side, in a flexed position (Figure 4.2). The head was oriented to the west (Denbow 1979, 1983a). A large stone had been placed over the head, resulting in severe damage. Another stone was placed over the feet and the right scapula rested on top of yet another stone (Denbow 1983a). Denbow excavated this skeleton, which appears not to have been included in the sample used by Murphy (1996). Murphy's report does not have Feature 5 Burial at Taukome.

Preservation

The cranium and mandible are missing but were present at the time of excavation. The postcranial skeleton is incomplete.

Age

In the absence of teeth to use for age determination, the individual's age was estimated from long bone lengths and was found to be about five to seven years old.

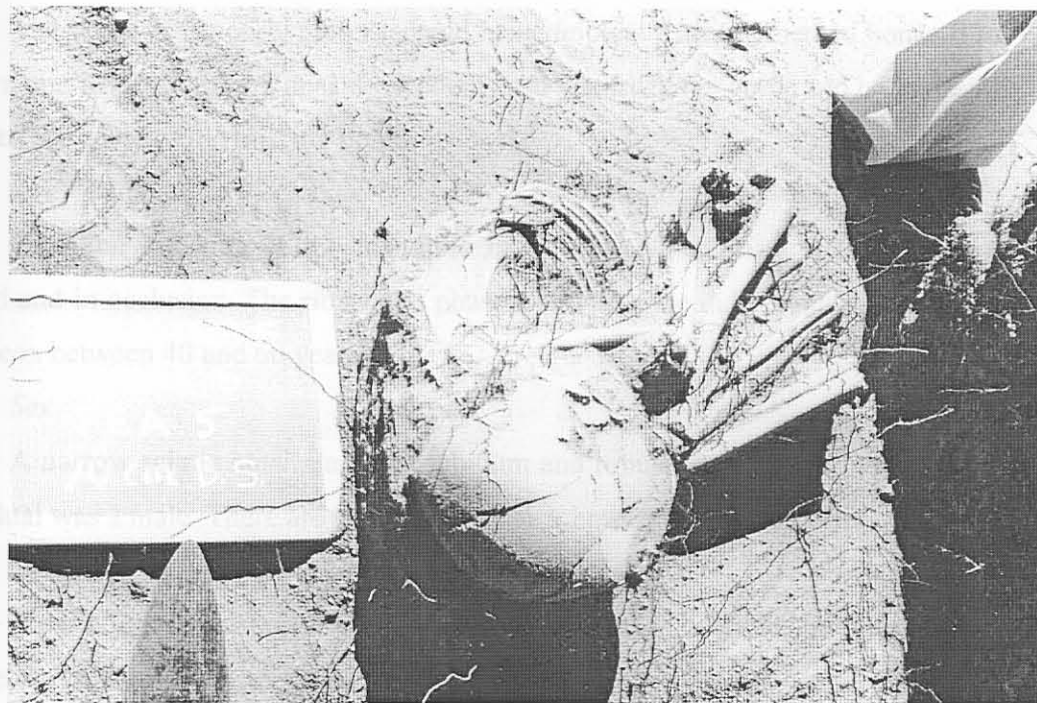
Bone pathology

There are no indications of bone pathology.

Conclusion

The remains are of a child of between five and seven years old. No signs of pathology were found on the skeleton.

Figure 4.2 Taukome Burial 4 in situ (Photo courtesy of JR Denbow)



Taukome Burial 5 (Feature 9)

Burial Style

The grave was found during excavations conducted by Denbow in the late 1970's and was probably not included in Murphy's sample since there is no burial associated with Feature 9 in Murphy (1996). About 100 m south of the main mound, a small pile of stones was excavated on a smaller mound (Denbow 1979b, 1983a). The pile was the only one of its kind on this side of the site. It turned out to be a human burial. The individual was on its right side with the head oriented to the west and the rest of the body to the east. The individual had been slightly flexed (Denbow 1979b).

Burial Goods

A large fragment of a beaker and a complete pot were found in association with this burial (Denbow 1979b; 1983a). These artifacts are associated with the Toutswe period.

Preservation

The skeleton is poorly preserved and is incomplete with fragmented bones. The cranium and lower limbs are missing. Rodents had disturbed the grave and had possibly removed some of the missing bones.

Age

Only the left side of the mandible is present. All permanent teeth were fully erupted and in occlusion. The ribs are in phase 6 and thus the individual was estimated to have been between 40 and 60 years old.

Sex

A narrow sciatic notch, large acetabulum and robust os coxae all indicate that the individual was a male. There are strong muscle attachments on the humerus.

Stature

This individual's stature was not estimated because none of the long bones was complete enough to allow measurement.

Bone pathology

Osteophytes are present on the vertebral bodies. Sternal ends of the first ribs that are normally cartilaginous had calcified and were fused to the manubrium.

Teeth

There are only 10 mandibular teeth available; these include the left teeth from the central incisor to the second molar plus the right canine and first premolar. Large dentine patches are exposed but still surrounded by enamel in all but the right first premolar in which only the root remains. Periodontal disease is evident.

Conclusion

The skeleton is of an adult male aged between 40 and 60 years old. Arthritis had affected some of the vertebral elements of this individual. The individual has advanced dental wear and lesions on the alveoli suggest periodontal disease.

Taukome Burial 6

Burial style

Burial 6 from this site is of an isolated incomplete maxilla. (Denbow 1979b; 1983a) found in Feature 2 in unit 3. The feature was essentially a small pile of stones.

Murphy (1996) mentions 'skull burial' in her report, which could possibly be this individual.

Burial goods

A large fragment of a pot possibly associated with the burial was recovered.

Preservation

Rodents had disturbed the feature from which the maxilla was found (Denbow 1979b). A partially complete left side of the maxilla was the only bone found.

Age

Maxillary teeth were used to estimate the age of this individual. The premolars, first and second permanent molars were in occlusion. Third molars had not erupted. The individual was estimated to have been 15 to 18 years.

Teeth

Only four posterior teeth of the left maxilla were examined. They are all in good condition; small patches of dentine are exposed on the first molar.

Conclusion

The remains are of an older child aged between 15 and 18 years. The remains are incomplete and therefore assessment of pathology could not be carried out.

4.4 Bosutswe Burials

Bosutswe Burial 2001/1

Burial style

The burial was found approximately 180 cm below the surface in the center of the site. The skeleton indicated that the individual was in a flexed position with the head oriented to the west. Denbow excavated the burial in 2001 and no previous studies have been done on it.

Preservation

This is a complete and well-preserved skeleton.

Age

The crowns of the first incisors are not fully developed and the two halves of the mandible are not fused. The infant is estimated to have been between zero and six months old.

Bone pathology

The skeleton shows no signs of pathology.

Conclusion

This is a skeleton of an infant aged between zero and six months old.

Bosutswe Burial 3

Burial style

This burial was found on level 8, 70 - 80 cm below the surface of square 103W6N. The deposit that this burial came from was hard and compact unburned dung. The head was oriented to the west with the rest of the body to the east. The body was on its left side with the face looking towards the north and was tightly flexed at the hips, knees and elbows (Figure 4.3).

Three large stones were placed at different locations within the grave. One stone was placed behind the thoracic vertebrae; the other stone next to the elbows while the last one was at the feet. The skull was slightly out of position. A sharp curving of the thoracic vertebrae where one stone was placed appears to have disoriented the head as well as the neck. The atlas was located a few centimeters away from the foramen magnum. The mandible was located just next to the shoulder girdle and the thoracic vertebrae.

The left hand was complete and well articulated and spread out. On the other side of one of the stones, the right hand appeared clenched. The left radius underneath a stone was broken at the distal end and it seems to have been broken by pressure from this stone. The pelvis had collapsed and was slightly out of position. The tibia and fibula of the left leg crossed over their right counterparts at midshaft. Both feet were underneath a stone. The grave was excavated by the author in 2002.

Burial goods

Two rounded clay discs were found a few centimeters from the skull but their association to the burial was unclear. The presence of a mandible of a sheep/goat next to the pelvic outlet was also tentatively associated with the burial. No grave goods with direct association were found.

Preservation

The skeleton is well preserved and complete.

Age

Rib phase analysis indicates a phase 4. Cranial sutures are closed but not obliterated. The sphenoccipitalis synchondrosis is closed. The individual was an adult of 30 to 40 years old.

Sex

The sciatic notch is narrow and the sacrum is long and narrow. The acetabulum is large. On the cranium, the nuchal crest is well developed and the mastoids are large. The mandible is robust and the gonial angles are flared. These features are indicative of a male.

Stature

A combination of the physiological lengths of the femur and tibia was used to estimate the maximum living stature of this individual. He was approximately 170 ± 2.56 cm tall.

Bone pathology

The orbits are complete and show no signs of cribra orbitalia. One of the metatarsals of the right foot has evidence of a healed fracture. On the same foot, one phalange shows evidence for excessive usage.

Dental pathology

All permanent teeth were present. On the buccal surfaces of the maxillary second molar and its mandibular counterpart, small carious lesions were found. The lesions appear as thin bands at the cemento-enamel junctions (CEJs). Thin bands of calculus are present on the labial surfaces of maxillary and mandibular anterior teeth and on interproximal surfaces of all mandibular molars. All teeth are worn, ranging from small to large sized dentine exposed.

Conclusion

This was a burial of an adult male aged between 30 and 40 years. He was approximately 167 to 173 cm tall. The individual had suffered a broken metatarsal, which had healed prior to death. Small carious lesions have been identified on some teeth. Dental wear was noted on some teeth.

Conclusion

The grave was of a juvenile aged seven to nine years. There are no signs of pathology on this individual.

*Bosutswe Burial 4**Burial style*

This burial was found underneath feature 5, which was a collection of stones in excavation squares 105W2N and 105W3N. The head was oriented to the west with the rest of the body to the east. The body was tightly flexed, on its right side, facing south. A small stone had been placed between the head and the left ribs and thereby pushing the mandible downwards. The same stone had forced the sternal ends of the left and right ribs away from each other (Figure 4.4).

The left arm was slightly flexed at the elbow, folded over one of the stones. Bones of the right hand were visible from underneath the stone on the southern side of the burial. The left upper leg had been placed directly over the right upper leg but the lower legs were crossed over each other so that the distal ends of the left tibia and fibula were below instead of over their right counterparts. This grave was excavated by the author in 2002.

Preservation

The skeleton is well preserved and complete. However, placing stones on top of the body had resulted in breaking the mandible and the proximal end of the left humerus.

Age

Most deciduous teeth are in occlusion and so are the permanent first molars and permanent maxillary central incisors. Maxillary lateral incisors are below occlusion. Second molars (permanent) are all developed but not erupted. Age is estimated to be 8 ± 1 years.

Bone pathology

The skeleton shows no indications of pathology.

Teeth

A total of 24 teeth (16 deciduous, two maxillary permanent central incisors, two maxillary permanent lateral incisors and four permanent first molars) were assessed for dental pathology. There are no pathological conditions besides wearing of deciduous molars.

Conclusion

The grave was of a juvenile aged seven to nine years. There are no signs of pathology on this individual.

*Bosutswe Burial 5**Burial style*

Burial 5 was found in level 11, about 100 cm below surface, underneath dung deposits. The individual was buried in a tightly flexed horizontal position on its right side. The head was oriented to the north and the body to the south, facing west. The forearms were placed in between the thorax and the flexed legs, such that the hands rested on the knees (Figure 4.5). No stones were associated with this burial and a small fragment of Toutswe ceramic was recovered from the grave fill. This burial was found on the center of the site approximately 110 cm below the surface in square 101-6W, 1-6N.

Some rodent disturbance was evident at the feet, and a large chunk of corroded iron found near the feet could not be certainly associated with the burial. The author excavated this burial in 2002.

Preservation

The bones are well preserved but somewhat mineralized. They appeared rusty-brown in color. This may have been caused by chemicals precipitating down from the dung deposit just above. This is a well preserved and almost complete skeleton, though damage on some epiphyses of long bones was noted.

Age

All permanent teeth were in use. Third molars show no signs of dental wear. Epiphyses of the elbow are obliterated while on the hip, ankle and knee, fusion has occurred but lines are visible to obliterated. The wrist and shoulder epiphyses are semi-detached and the rest of the epiphyses are not fused. The remains are estimated to be of a 17 - 20 year old individual.

Sex

A narrow sciatic notch, a long and narrow sacrum and a large acetabulum suggest a male individual. Furthermore, the mandible has an angular corpus and its ramus is flexed. The nuchal crest is moderate and there is slight development of the brow ridge.

Bone pathology

Partial spina bifida occulta was identified on the fifth lumbar vertebra.

Teeth

All permanent teeth were present. More than half of the maxillary left first molar had been eroded by dental caries. Another carious lesion is present on the mandibular

right premolar's mesial surface. Thick calculus deposits surround enamel on each mandibular tooth between the left central incisor and the right canine. Little dental wear is present. The left mandibular canine has an enamel hypoplastic line.

Conclusion

The individual was a male adolescent, aged between 17 and 20 years. The individual has evidence of partial spina bifida occulta. Carious lesions were identified on some of the teeth.

Bosutswe Burial 6

Burial style

This burial was found between 100 and 110 cm below the surface, just next to Burial 5, in a flexed position. The individual was oriented in a north-south direction with the head towards the north. The face was looking towards the west and was slightly elevated (Figure 4.6a). The hands were placed next to the chin, and like Burial 5, the bones were mineralized.

A stone was placed next to the hands, with another next to the lumbar vertebrae. The stone above the hands had crushed the right radius and ulna. Both feet were directly underneath a stone placed in the lumbar region, and the same stone had severely crushed most of the ribs and the vertebrae.

After removal of these stones, it was found that the neck had been twisted so much that the occipital bone was almost in contact with the ribs. The extent to which the vertebrae were twisted may indicate antemortem trauma, or burial practice, as it seemed unlikely that in situ movements during decomposition caused it (Figure 4.6b). The grave was excavated by the author in 2002.

Preservation

Several heavy stones were placed on top of this individual, resulting in damage to the some bones. The skeleton is, however, complete.

Age

Most deciduous teeth are in occlusion and so are the permanent first molars, maxillary central incisors and permanent canines are below occlusion. Permanent second molars and a maxillary left canine are below occlusion. A right maxillary first premolar is visible but not erupted. The juvenile is estimated to be seven to nine years old.

Bone pathology

The skeleton shows no indications for pathology.

Teeth

A total of 24 teeth were present. These included the 20 deciduous teeth and four permanent first molars. Dental caries was identified on a canine and a first molar (all deciduous) of the left maxilla, occurring as small lesions on interproximal surfaces. Calculus was found on some of the teeth. The maxillary incisors are not worn while the canines and molars have large dentine patches exposed but still surrounded by enamel. The same goes for mandibular teeth except for its canines, which have small dentine patches exposed. All permanent molars show little wear.

Conclusion

The skeletal remains are of a child aged between seven and nine years. There are no signs of pathology found on the skeleton. There are, however, carious lesions on some of the individual's teeth.

Bosutswe Burial 7

Burial style

The burial was found at approximately 120 cm below surface in squares 102W1N and 102W2N on the western side of the site. The individual was an infant, buried with the head oriented in a northwest direction. It was horizontally flexed, laid on the right side facing southwest. The legs had been drawn up to the face and the knees were extended, bringing the feet close to the head. One stone had been placed next to the legs and two stones were on the pelvis. The author excavated this burial in 2002.

Burial goods

Numerous ostrich eggshell beads were recovered from around the neck and waist (Figure 4.7). These were remains of a necklace and waistband. Unfortunately the material used to put the beads together was not preserved.

Preservation

The skeleton is nearly complete but is in poor preservation condition. The bones are fragile and discoloured and the cranium is fragmented.

Age

The dentition is still deciduous. Mandibular canines are not yet in occlusion and all second molars were about to erupt, while the rest of the teeth were in use. The anterior fontanel is partially closed and the metopic suture is obliterated. The infant is estimated to have been between 18 and 24 months old.

Bone pathology

There are no lesions associated with pathology on this skeleton.

Teeth

A total of 14 teeth were available for assessment. Results showed no pathological conditions on any of the teeth.

Conclusion

This burial is of an infant of 18 to 24 months. There are no indications of pathology on the skeleton.

*Bosutswe Burial 8**Burial style*

The burial came from level 13 (120 - 130 cm below surface) in square 102W5N on the western side of the site. The cranium was in a southeast orientation, looking towards the northeast. The individual was in a flexed position on the right side (Figure 4.8). Some stones had been placed on top of the burial and they had collapsed into the grave. The neck had been twisted backwards. This burial was excavated by the author in 2002.

Burial goods

A complete clay beaker was found about 15 cm behind the cranium, with its mouth facing the west. It is a classic Toutswe type of beaker with no decoration, about 15 cm in height with a curved instead of flat base (Denbow: personal communication).

Preservation

Insect nests were present around the burial and the long bones of the lower body had been disturbed. Several bones of this burial were found out of what should have been their original position. Gnaw marks on the mandible and disturbed bones indicate that burrowing animals had, at some point in the past, accessed the burial but their nests were

not visible at the time of excavation. Left ribs were missing and the cranium was crushed on the right side. The bones are fragile, especially the cranium, and are discolored.

Age

All deciduous teeth were in occlusion and the permanent first molars had not erupted. Moreover, the lateral parts of the occipital were not yet fused to the squama. These indicators suggest an age of three to five years.

Bone pathology

There are no indications for pathology on the skeleton.

Teeth

A total of 15 teeth (10 mandibular and five maxillary) were examined. Pitting enamel hypoplasia on mandibular canines are the only dental defects identified.

Conclusion

The skeleton is of a juvenile aged between three and five years. The individual has no signs of pathology.

Bosutswe Burial 9

Burial style

The burial was found on level 13 (120 - 130 cm below surface) in square 104WIN on the western side of the site. It was not possible to identify the orientation and manner in which the body had been placed in the grave, due to its destruction and incompleteness. The author excavated it in 2002.

Burial goods

The human remains were found mixed and close to a complete Toutswe type beaker. Due to disturbance of the grave it was not possible to identify the manner in which the beaker had been placed in relation to the body.

Preservation

Burrowing animals had disturbed the grave and the skeleton is incomplete and was poorly preserved. There are fragments of the cranial bones together with two complete femora and a fragment of the right tibia.

Age

On the basis of the length of the femur, the skeleton belongs to a newborn baby.

Bone pathology

There are no pathological lesions identified.

Conclusion

The remains are of a newborn/fetus.

*Bosutswe Burial 11**Burial style*

The burial was found in square 93WIN just east of a small semi-circular stonewall at about 70 cm below the surface on very fine, ashy soil. The individual had been horizontally flexed and the head was oriented to the west and looked to the south. It was on its right side (Figure 4.9). Both arms were tightly flexed and the hands were placed in front of the face. Several heavy stones had been placed on top of the burial. It was excavated in 2002 by the author.

Preservation

The cranium is damaged and facial bones including the maxilla are fragmented. Postcranial bones are generally well preserved but some show damage resulting from stones placed on the burial.

Burial goods

Several fragments of clay vessels were retrieved from the grave. Three of these were rim pieces and the others were body fragments. One of the rim pieces was from a straight vessel with no decoration and its measurements indicate that the vessel was at least 15 cm deep. The other two rim pieces were from a single vessel with a constricted neck. It had a single band of combstamping decoration bordered by single incision lines. The band was about half a centimeter thick and had been placed about half way between the root of the neck and the rim. The vessels are of a typical Toutswe tradition (Denbow 1983b).

Age

Maxillary deciduous second molars had not been shed and almost all permanent teeth are in occlusion except for maxillary first premolars and third molars. Epiphyses indicate that only the distal humerus and proximal femur were fused. Their fusion lines are still visible. The rest of the epiphyses are detached. On the basis of these, the individual's age is estimated to be 13 to 15 years.

Bone pathology

The sacrum has evidence of partial spina bifida occulta.

Teeth

A total of 14 maxillary and 14 mandibular teeth were available for analysis. The right maxillary lateral incisor is peg-shaped. A small amount of calculus is present on the labial surfaces of the mandibular incisors. There is little wear on all teeth, but the deciduous second molars are more worn than the rest of the teeth. A small lesion associated with dental abscessing on the mandibular left second premolar was found. A thin band of linear enamel hypoplasia occurs on anterior mandibular teeth including the first premolars. On the maxilla, enamel hypoplasia has been noted on the lateral incisors and left canine.

Conclusion

The remains are of an older child aged between 13 and 15 years. Evidence for spina bifida occulta was found on the sacrum. Teeth have calculus deposits as well as dental abscessing.

*Bosutswe Burial 12**Burial style*

The burial was discovered in square 91W, 3N, east of the semi-circular stonewall, between 70 and 80 cm below surface in a fine brownish soil deposit. The body had been horizontally flexed with the head oriented to the west lying on the right side (Figure 4.10). Five stones had been placed in a circular manner around the burial with the largest of them on top of the cranium. The tibiae and fibulae crossed over each other at midshaft. Both knees were located underneath one of the stones.

A circular floor surrounding Bosutswe Burial 12 clearly indicated that the grave had been dug onto a previous dwelling floor of some kind. The edges of the floor were elevated. On the northern side of the wall of the excavation unit, another piece of floor was discovered below the floor with Burial 12. It was tentatively concluded that two floors had been sequentially built on top of each other before the grave was subsequently dug through them. It was also evident that not much of the floors had been destroyed at the time of digging the grave. The burial shaft had been wide enough to fit the flexed

body without leaving much space between the body and the wall of the grave. This grave was excavated in 2002 by the author.

Preservation

The skeleton is complete and well preserved.

Age

Cranial sutures are almost all obliterated and the teeth are severely worn. All epiphyseal lines are obliterated. The rib phase analysis indicates that the ribs were at phase 7 and therefore the individual was aged between 50 and 75 years.

Sex

The sciatic notch is narrow, the sacrum long and narrow and the acetabulum large. The mandible is robust with flaring gonial angles and large teeth. The individual had a well-pronounced nuchal crest, large mastoids and the brow ridge is fairly pronounced. In addition, the individual had robust bones. The features are indicative of a male.

Stature

Physiological lengths of the tibia and fibula were combined to estimate the living stature of this individual. He was approximately 170 ± 2.56 cm in height.

Bone Pathology

The individual had suffered from multiple defects some of which were due to degenerative conditions. For instance, there are osteophytes on many of the joint surfaces. The atlas and axis are fused to each other. The mandibular condyles are also affected. The sacrum had possibly fused to the os coxae and the fifth lumbar vertebrae had been sacralised. This individual had possibly suffered from DISH and is discussed in more detail in Chapter 6.

Teeth

All permanent teeth are present, except for the mandibular right first molar, which had been lost antemortem. Thin calculus deposits were present on the lingual and labial surfaces of all mandibular teeth as well as maxillary molars. All maxillary incisors are worn down to root level and the canines have small enamel remaining. Dental caries was identified on maxillary second and third molars on both sides of the maxilla. All lesions were located on interproximal surfaces and about a quarter of the surface had been affected in all cases. On the mandibular teeth, dental wear had affected all teeth, except

third molars, exposing large patches of dentine but still surrounded by enamel. All third molars have small patches of dentine exposed. Dentine exposure on maxillary second premolars and second molars ranged between medium and large size patches.

Dental abscesses are present at the right mandibular first molar, between the first and second molars of the left side of the mandible and also on the maxillary left premolars. Dental abscess may have triggered loss of the right mandibular first molar. In addition to these, periodontal disease was identified on the mandibular incisors and canines. The condition may have been triggered by reduction in crown height of their maxillary counterparts.

Conclusion

The skeleton is of a male aged between 50 and 75 years, approximately 167 to 173 cm in height. The individual suffered from degenerative conditions affecting several joints on both the cranial and postcranial skeleton. He had poor dental health as indicated by dental abscessing and dental caries as well as antemortem tooth loss.

Bosutswe Burial 13

Burial Style

Remains of Burial 13 were found in square 93W, 2N, east of the semi-circular stonewall, at about 100 cm below surface. The body had been slightly flexed and was oriented to the west, facing north. It was on its left side. Stones were placed in a circular manner around the burial, and unlike the other burials, the stones were next to the skeleton not on top of it (Figure 4.11). The left elbow was tightly flexed and the head rested on the left arm. The left leg had been brought slightly closer to the body than the right leg and the tibiae and fibulae crossed over each other at midshafts. The grave was excavated in 2002 by the author.

Burial goods

Several fragments of a single clay vessel were retrieved from the grave. The vessel was identified as being of the Toutswe type (Denbow 1983a).

Preservation

The cranium and mandible are well preserved. Even though some of the long bones are crushed and the os coxae are fragmented, this is a generally well-preserved and complete skeleton.

Age 4.4 Bosutswe Burial 3 in situ

Except for the third molars and maxillary second molars, all permanent teeth are in occlusion. On the distal humerus epiphyseal lines are nearly obliterated whereas those on the proximal ulnae are visible. The proximal femur is semi-detached. The rest of the epiphyses are detached. The individual's age is estimated to 13 ± 1 years.

Bone pathology

The skeleton has no evidence for pathology.

Teeth

A total of 28 (14 maxillary and 14 mandibular) teeth were examined. These excluded all third molars. The maxillary central incisors are shovel shaped. There is little calculus deposited in most of the teeth. Linear enamel hypoplasia is present on the anterior teeth of both the maxilla and the mandible.

Conclusion

The remains are of a child aged between 12 and 14 years. There are no indications of bone pathology on the skeleton. Teeth show little calculus deposits.

Figure 4.3 Bosutswe Burial 3 in situ. Note stones placed by the knees and feet.

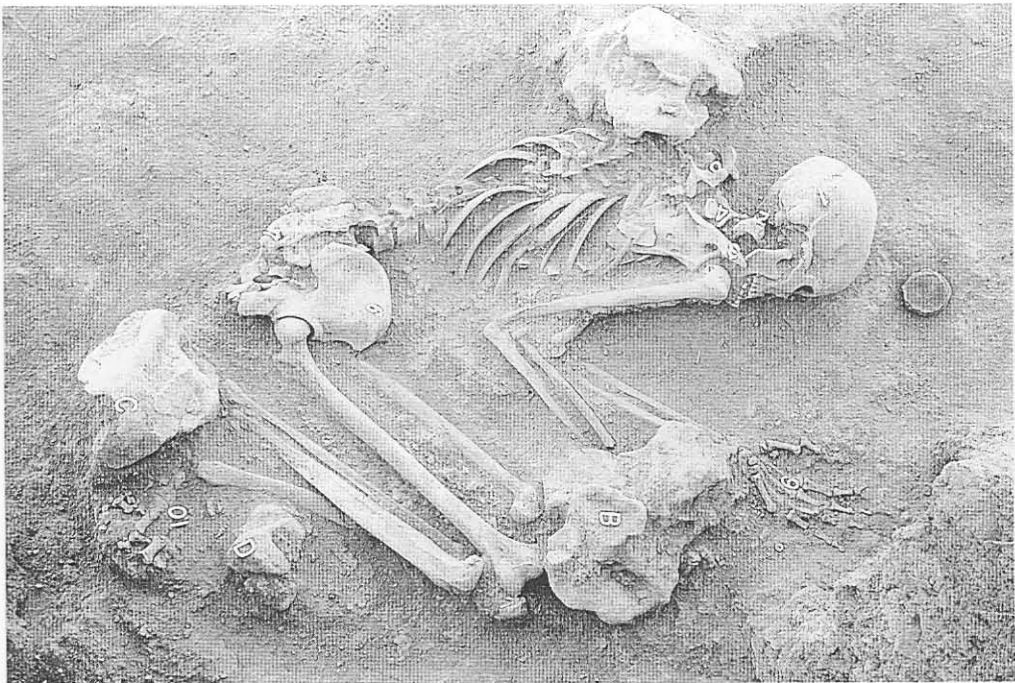


Figure 4.4 Bosutswe Burial 4 in situ



Figure 4.5 Bosutswe Burial 5 in situ

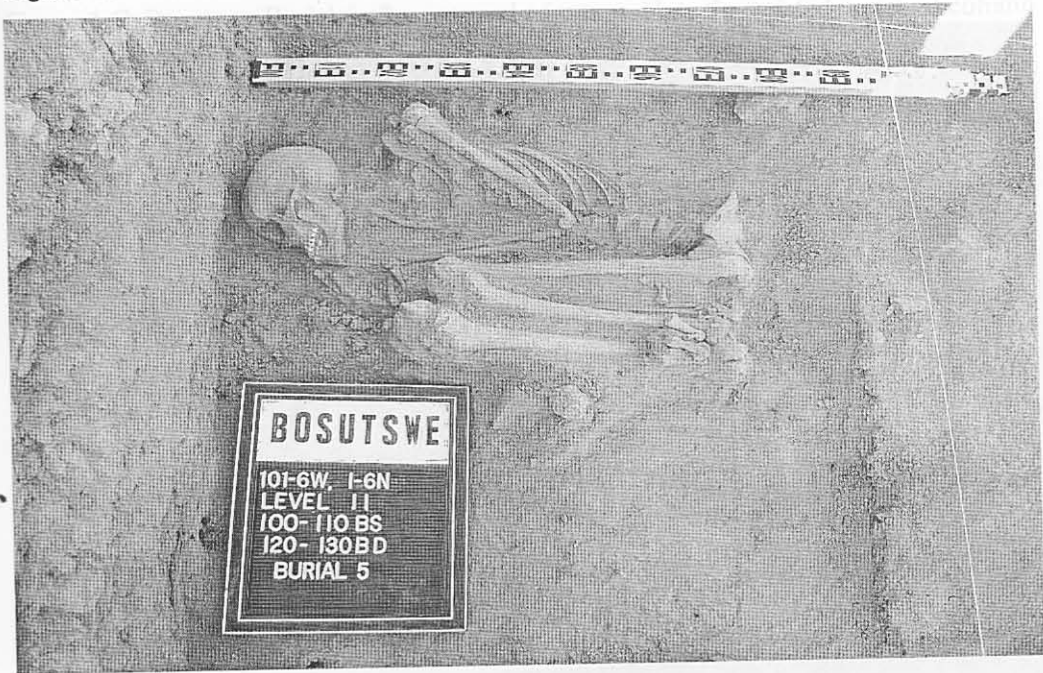


Figure 4.6a Bosutswe Burial 6 before stones were removed



Figure 4.6 Bosutswe Burial 6 in situ note a complete clay head or rest to the head

Figure 4.6b Bosutswe Burial 6 after removal of stones. Note the twisted vertebral column

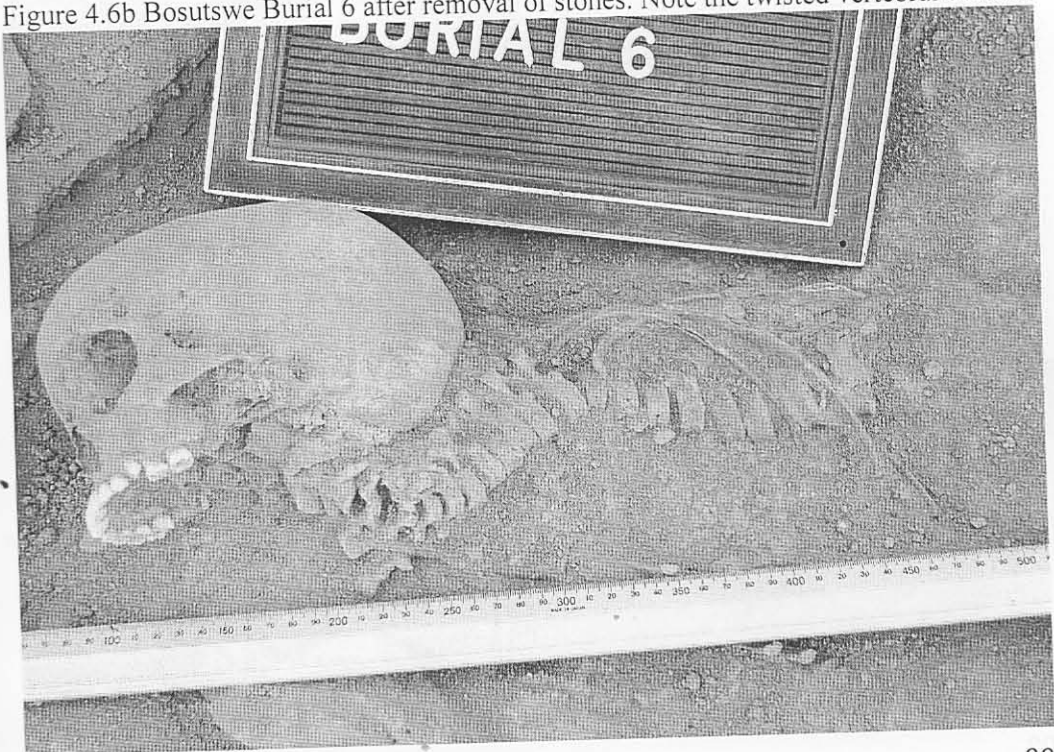


Figure 4.7 Close up view of ostrich eggshell necklace on Bosutswe Burial 7



Figure 4.8 Bosutswe Burial 8 in situ note a complete clay beaker next to the head

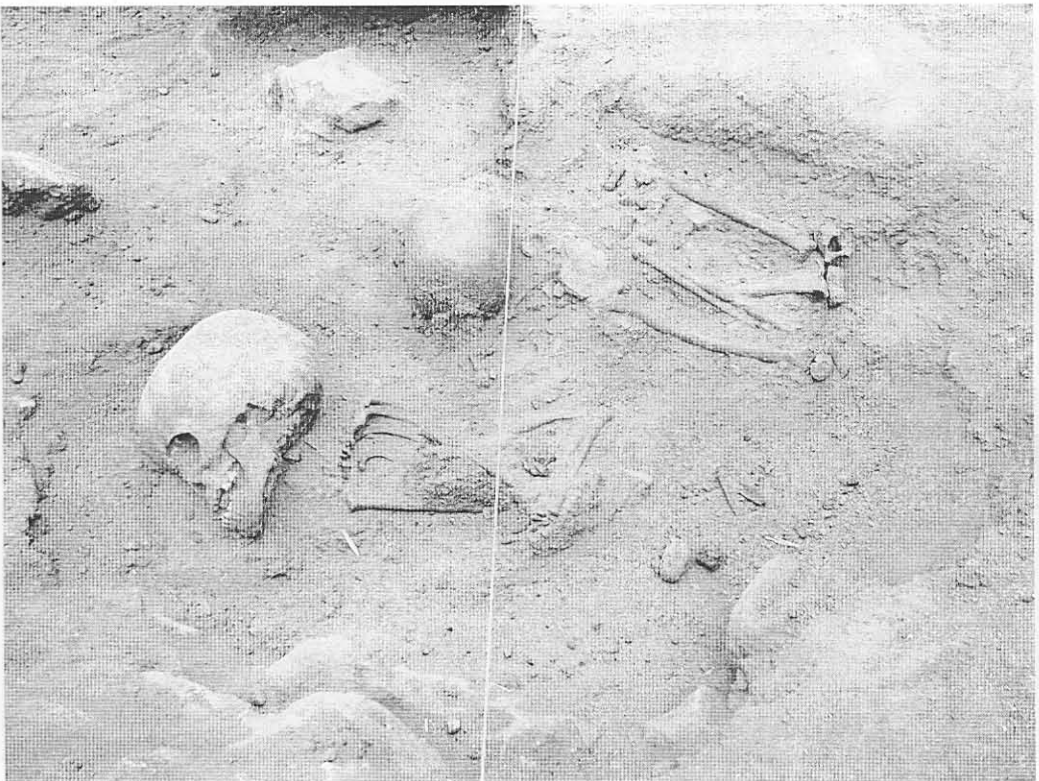


Figure 4.9 Bosutswe Burial 11 in situ



Figure 4.10 Bosutswe Burial 12 in situ



Figure 4.11 Bosutswe Burial 13 in situ



4.5 Thatswane Burials

Thatswane Burial 3

Burial Style

The body was in a horizontally flexed position with the head oriented to the west (Denbow 1979b). Denbow excavated it in 1979. The skeleton has not been examined before.

Preservation

The skeleton is poorly preserved and is incomplete. Most of the bones are fragmentary.

Age

All deciduous teeth are in occlusion and none of the permanent teeth had erupted. The basilar and lateral parts of the base of the occipital bone are not fused to each other or to the squama. On the basis of these, the individual's age was estimated to be three to five years.

Bone pathology

The skeleton shows no indications for pathology.

Teeth

A total of 15 teeth, six mandibular and nine maxillary, are present. Pitting enamel hypoplasia is present on the maxillary canines.

Conclusion

The skeletal remains are of an infant aged between three and five years old. The skeleton does not have any signs of bone pathology but has enamel hypoplasia.

Thatswane Burial 4

Burial style

The grave was found approximately 80 cm below the surface in unit 4 (Denbow 1979b). The individual had been placed in a tightly flexed position on the right side (Figure 4.12). It was excavated in 1979 by Denbow but has not been studied before.

Preservation

Grass roots had grown down to the level of the grave, thereby threatening the preservation of the bones. From the pictures provided by Denbow, the skeleton was complete at the time of excavation but the skull and mandible are currently missing. Bones present are in a fairly good state of preservation.

Age

Neural arches of the thoracic vertebrae are not fused to the centers. Long bone lengths were used to determine the age of this individual, which was estimated to have been between eight and 10 years.

Bone pathology

The skeleton shows no signs for pathology.

Conclusion

The remains are of a child aged between eight and 10 years. No pathological conditions were identified on the skeleton.

Thatswane Burial 5

Burial style

The body was in a flexed position, on the left side. It was found about 90 cm below the surface in unit 4. The head was oriented to the west (Figure 4.13). The grave was excavated in 1979 by Denbow (Denbow 1979b). The skeleton has not been studied before.

Figure 4.12 Thatswane Burial 4 in situ (Photo courtesy of JR Denbow)



Preservation

Vegetation close to the burial threatened the preservation of the bones. The cranium appears to have been complete but fragmentary. The skull and mandible are missing and bones present are fragmentary. The postcranial skeleton is incomplete.

Age

The individual was an adult, but unfortunately sternal ends of the ribs were not preserved and age was inferred from degenerative changes of the vertebral column. Arthritic changes and osteophytes developed on the vertebral column, suggest an adult of about 40 to 60 years old.

Sex

The sacrum is short and broad and a preauricular sulcus is present. The individual was probably a female.

Stature

This female's stature was estimated from a combination of the physiological lengths of the femur and tibia. She was about 168 ± 2.56 cm tall.

Bone pathology

There is evidence of arthritic disease on the patellae, proximal ends of the femora, the feet and on the vertebrae.

Conclusion

The skeleton has been identified as that of an adult female of between 40 and 60 years. Stature of this individual is estimated to be between 165 and 170 cm. Arthritic changes were observed on several bones.

Thatswane Burial 6

Burial style

The body had been placed in a horizontally flexed position (Denbow 1979b). The grave was found during excavations conducted by Denbow in 1979 and the skeleton has not been studied before.

Preservation

This skeleton is incomplete. The cranium is fragmentary and its right side is missing. Long bones are also damaged and most of them do not allow for maximum lengths to be measured. Porcupine gnaw marks were identified on the left femur and on the tibiae.

Age

Most of the teeth have been lost postmortem. Third molars are developed but not erupted. Epiphyses of long bones are not fused. Age was estimated to be 10 - 12 years.

Bone pathology

The skeleton does not have lesions associated with pathology.

Teeth

Ten maxillary and nine mandibular teeth were assessed. There are medium sized deposits of calculus on maxillary left first molar, right lateral incisor and on the mandibular central incisors. The maxillary right first molar has a much thinner deposit. In all incisors, calculus is present on the labial surfaces while on the molars it is buccal. Very thin enamel hypoplastic lines are present on the mandibular canines.

Conclusion

The skeleton is of a child aged between 10 and 12 years. There are no indications of bone pathology, but the teeth have enamel hypoplastic lesions and small calculus deposits.

Figure 4.13 Thatswane Burial 5 (Photo courtesy of JR Denbow)



4.6 Dikalate Burial

Dikalate Burial 1

Burial style

The head of this individual was oriented to the west and the body was in a horizontally flexed position on the right side. The grave was situated in the middle of the site and was shallow (Reid 1999a). The grave was excavated by the author under supervision of Reid.

Preservation

The cranium and right side of the mandible are distorted but nearly complete and so is the postcranial skeleton. The skeleton was well preserved.

Age = 4.14 Mosu 3 Burial 1 in situ (photo courtesy of A Reid)

The two halves of the mandible are not fused. Some tooth germs are present. Age of this individual is estimated to be between zero and six months old.

Bone pathology

The remains of this infant show no evidence for pathology.

Conclusion

The skeleton is of a newborn baby of between birth and six months old. There are no indications of pathology.

4.7 Mosu 3 Burial

Mosu 3 Burial 1

Burial style

The individual was found in a horizontally flexed position with the head oriented to the west and was laid on the right side (Figure 4.14). The legs were slightly flexed and the right arm was stretched but the left arm was flexed. The grave was found approximately 20 cm below surface in the fine ashy soil deposits. The burial was excavated by Reid in 1997.

Burial goods does not have evidence for pathology.

Two large clay vessels were placed next to the individual, one behind the back and one in front between the flexed legs and the skull. Both vessels were found fragmented. A complete small clay beaker was located next to the knees. Remains of ostrich eggshell bead necklace were found around the cervical vertebrae.

Preservation is of an adolescent aged between 17 and 20 years. Tentative results

The skeleton is generally complete and in good condition. However, the cranium is fragmented, distorted and not complete. The mandible is fragmented but complete.

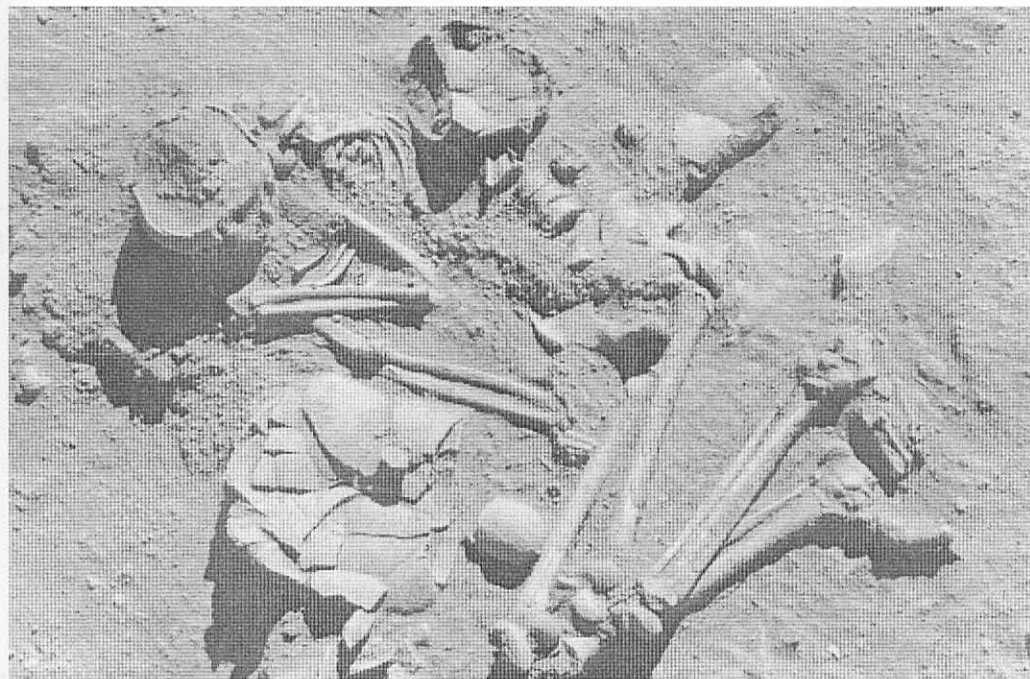
Age = 17.14 Mosu 3 Burial 1

Only the distal humerus is fused while all other epiphyses are detached. Permanent teeth are in occlusion except for the third molars, which are not yet erupted. Age is estimated to be 17 to 20 years.

Sex

The individual was immature but a narrow sciatic notch suggests a male.

Figure 4.14 Mosu 3 Burial 1 in situ (photo courtesy of A Reid)



Bone pathology

The skeleton does not have evidence for pathology.

Dental pathology

All maxillary and mandibular incisors have been lost postmortem and third molars had not erupted. There are no indications of dental pathology on all teeth.

Conclusion

The skeleton is of an adolescent aged between 17 and 20 years. Tentative results of sex determination are indicative of a male.

4.8 Thataganyane Burial

Thataganyane Burial 1

Burial style

The burial was excavated in 1992 and unfortunately there is no report regarding circumstances leading to its discovery, grave description, and provenance. There are no records accompanying the skeleton and the excavator is unknown. The bones have not been examined before.

Preservation

The skull and mandible are both fragmentary. A fragment of the right iliac bone is the only postcranial bone present.

Age pathology

All permanent teeth are in occlusion and worn, including the third molars. The individual was aged between 20 and 40 years.

Sex

A narrow sciatic notch and an angular corpus of the mandible are indicative of a male.

Bone pathology

There is no evidence for pathology.

Teeth

The maxillary right second premolar and first molar have small carious lesions on their interproximal surfaces. There is little dental wear in all teeth but not on maxillary and mandibular second and third molars.

Conclusion

The remains are of a young adult male aged between 20 and 40 years old. There are no skeletal lesions on this individual and the teeth demonstrate small carious lesions.

4.9 Serowe Hill Burial*Serowe Hill Burial 1**Burial style*

D. Schemers excavated the burial in 1978 above Thataganyane Hotel. There are no site records accompanying the bones and as a result there is no information regarding its burial style and provenance. The remains have not been studied before.

Preservation

The remains comprise of lumbar vertebrae, sacrum, and fragments of the iliac and pubic bones. The left and right ischial bones are complete.

Age

All epiphyses found are fused and obliterated. There are no pathological conditions found on the vertebrae and other joints. The individual is estimated to have been approximately 20 to 40 years old.

Sex

The remains are possibly of a female, as suggested by an incomplete but evidently wide sciatic notch.

Bone pathology

There are no signs of pathology.

Conclusion

The skeleton is too incomplete to allow for more accurate estimation of age but is estimated to have been 20 to 40 years old. The individual was possibly a female. There are no signs of pathology and stature could not be estimated, since no complete long bones were found.

4.10 Swaneng Hill Burial*Swaneng Hill Burial 1**Burial style*

The burial was excavated in 1989 and currently its field records are not available. The excavator, provenance and burial style of this particular skeleton are unknown. The bones have not been studied before.

Preservation

This skeleton constitutes of a partially complete cranium, an incomplete mandible and incomplete cervical vertebrae only. The entire right side of the cranial vault is missing. The bone surrounding the missing part is whitened, probably due to long exposure to direct sun (Brothwell 1981).

Age

The third molar is in occlusion but the sphenoccipitalis synchondrosis is still open, thereby suggesting an individual of 20 to 30 years old.

Sex

The nuchal crest is well developed and the mastoids are large. The mandibular ramus is slightly flexed. The individual was probably a male.

Bone pathology

The diploe is thick, but there are no other indications of bone pathology.

Teeth

All maxillary teeth are present, and on the mandible the right canine, premolars and all three molars plus the left third molar are present. There are small calculus deposits on the maxillary left teeth.

Conclusion

The skull is of an adult male aged between 20 and 30 years. Stature could not be estimated as there are no long bones.

4.11 Kgaswe B-55 Burials

Kgaswe B-55 Burial 1

Burial style

The burial was found towards the northern area of the site. It was in a horizontally flexed position with the head oriented to the west (Denbow 1990). It was located just along the edge of the mound on the northern side of the site. The burial was excavated by Denbow in 1983 and has been analysed by Murphy (1996).

Preservation

Most of the skeleton is missing and available parts are fragmented. The skull is fragmented and distorted and the mandible is about half complete.

Age

Most of the teeth are missing but those present indicate that permanent teeth were in occlusion but third molars had not erupted. Age is estimated to have been about 15 to 20 years old.

Bone pathology

The skeleton has no evidence for pathology.

Teeth

A total of 23 permanent teeth were present. Two canines have linear enamel hypoplasia and one canine has pitting enamel hypoplasia.

Conclusion

The individual was an adolescent of 15 to 20 years old. There are no indications of bone pathology and three canines have enamel hypoplastic lesions.

*Kgaswe B-55 Burial 2**Burial style*

This burial was found along the northern most end of the midden close to a hut floor (Denbow 1990). It was a few meters from Burial 1. It was in a horizontally flexed position with the head oriented to the west. The burial was excavated in 1983 by Denbow and was included in the stable isotope analysis by Murphy (1996).

Burial goods

Numerous fragments of clay vessels were found and are associated with this individual. The fragments are from different vessels, none of which are complete.

Preservation

The cranium is well preserved but its right side has been partially destroyed, presumably during excavation because it had fresh breaks. The postcranial skeleton is nearly complete and well preserved.

Age

All permanent teeth are in occlusion and worn, but unfortunately fragments of ribs recovered do not have sternal ends. The vertebrae are not preserved. Based on cranial sutures, age of this individual is estimated to have been between 30 and 50 years.

Sex

The sciatic notch is fairly wide and the acetabulum is small. The mandible is slightly angular, and the mastoids are small. Thus the individual was diagnosed as female.

Stature

The living stature of this female is estimated to be 151 ± 2.56 cm. It was calculated on the basis of a combination of the physiological lengths of the femur and tibia.

Bone pathology

The skeleton has no evidence for pathology.

Teeth

Maxillary central incisors and a mandibular right central incisor and right canine are missing postmortem. Therefore a total of 28 permanent teeth were present. Thick deposits of tartar are present on the lingual surfaces of the mandibular anterior teeth. Other teeth have thinner calculus. Enamel hypoplastic lines are visible on the second and

third molars of the left side only, on both the maxillary and mandibular teeth. Most teeth have advanced dental wear.

Conclusion

The remains are those of a female individual aged between 30 and 50 years. She was approximately 148 to 154 cm tall. No skeletal lesions were found. Calculus deposits and enamel hypoplastic lesions were present found on the teeth.

Based on cranial measurements, age of this individual is estimated to have been

Kgaswe B-55 Burial 3

Burial style

Burial 3 was also on the northern side of the midden, but unlike Burials 1 and 2 it was not close to hut remains. It was found on the north central part of the site. It was in a horizontally flexed position with the head oriented to the west (Denbow 1990). Denbow excavated the burial in 1983 and the skeleton has been studied before by Murphy (1996).

Preservation

The skeleton is fragmented and incomplete.

Age

No teeth are present, and most of the bones are fragmented and epiphyses have been lost. However, the proximal radius is fused but not obliterated while the epiphyses of the proximal femur and proximal tibia are still detached. The individual was therefore an older child of about 12 to 14 years old.

Bone pathology

There are no indications for pathology.

Conclusion

This skeletal remains are of an older child aged 12 to 14 years with no indications of bone pathology.

Third molars have no wear, thereby indicating that they had been in use for only a

Kgaswe B-55 Burial 4

Burial style

The grave was found within the central animal kraal in the center of the site. It was in horizontally flexed position with the head oriented to the northwest (Denbow 1990). The burial was situated next to the northeastern end of the central kraal, a few

meters south of Burial 27. Denbow excavated it in 1983 and the bones have been studied before (Murphy 1996).

Preservation

The burial comprises only of a juvenile cranium with no facial bones and no postcranial skeleton.

Age

Based on cranial measurements, age of this individual is estimated to have been between five and 10 years.

Bone pathology

The skull of this individual has no indications for pathology.

Conclusion

The skull belongs to a juvenile of approximately five to 10 years old. No pathological lesions were found.

Kgaswe B-55 Burial 5(1)

Burial style

Two individuals, both labeled Burial 5, were found. This made it difficult to evaluate the burial style and provenance of the burial being discussed. Denbow excavated the skeleton in 1983 and it is possible that it was analysed by Murphy (1996) whose sample included one Burial 5.

Preservation

The cranium is complete but has been reconstructed from several fragments. The right side of the mandible is complete, but only 2 of its teeth have been preserved. The postcranial skeleton is partially complete.

Age

Third molars have no wear, thereby indicating that they had been in use for only a short time before death. Ribs are in phase 1, placing the individual at an age of between 18 and 22 years.

Sex

The sciatic notch is narrow and the sacrum is long and thin. The individual was a male.

Bone pathology

There are no indications for pathology.

Teeth

All maxillary incisors have been lost post mortem. In the mandible, the right canine, right first and second molars are the only teeth present. There are very faint enamel hypoplastic lines on both maxillary canines.

Conclusion

The individual was a male of about 18 to 22 years old. The skeleton has no signs of pathology.

Kgaswe B-55 Burial 5(2)

Burial style

These are remains of the second individual labeled burial 5. The burial style and provenance of this individual could not be determined from the report written by Denbow (1990) because of reasons mentioned above. It was excavated by Denbow.

Preservation

The skeleton comprises of a complete adult left femur and a fragment of a tibia only.

Age

The remains are of a middle-aged adult aged between 30 and 50 years as estimated from the basis of bone pathology.

Sex

The size of the head of the femur (45.7 mm) falls within the male range.

Stature

The individual's stature was estimated from the physiological length of the femur. He was about 173 ± 2.80 cm tall.

Bone pathology

The inferior articular surface of the femur has small osteophytes.

Conclusion

The remains are of an adult male of approximately 30 to 50 years old and was approximately 170 to 176 cm tall. The distal end of the femur has small osteophytes.

*Kgaswe B-55 Burial 6**Burial style*

The burial was located in the center of the midden not far from Burial 25. The grave was not close to any structure. It was in a flexed position with the head oriented to west (Denbow 1990). The skeleton has not been examined before. It was excavated in 1983 by Denbow and was assessed by Murphy (1996).

Burial goods

A fragmented but nearly complete clay bowl was found in association with this burial. It is shallow and flat-based bowl with a thick rim. The rim and the body are not decorated. Its exact location in relation to the skeleton is currently unknown. It is a Toutswe type vessel (Denbow 1983b).

Preservation

The bones are dark brown in color and much different from the other burials of the same site. The bones are, nevertheless, well preserved. The skull is fragmented and incomplete and the mandible is missing.

Age

The lengths of the ulna and femur both indicate an age range of six to eight years old.

Bone pathology

The skeleton has no evidence for pathology.

Conclusion

The skeleton is of a child six to eight years old with no observable pathological lesions.

*Kgaswe B-55 Burial 7(1)**Burial style*

The burial style of this individual could not be deduced from Denbow's report since two individuals were labeled Burial 7 in the laboratory, while the report mentions only one Burial 7. It is therefore not clear which one of these two is consistent with Denbow (1990). The remains discussed here are of the younger of the 2 individuals labeled burial 7 from the same site. The bones have not been studied before since Burial

7 used by Murphy is of an adult and therefore not consistent with the individual referred to as Burial 7(1). Denbow excavated the grave in 1983.

Preservation

The skull and mandible are fragmented, incomplete and distorted. The postcranial skeleton is incomplete. There are animal gnaw marks on some of the teeth.

Age

Third molars appear to have erupted not long before death since they are not worn. The individual was aged between 17 and 25 years.

Sex

Sex of this individual was not determined because relevant bones were missing.

Bone pathology

The skeleton shows no indications for pathology.

Teeth

The individual had no dental defects except for slight wear. A total of 24 teeth is present, some of which have enamel removed by burrowing animals as indicated by gnaw marks. They could thus not be assessed for pathology.

Conclusion

The individual was an adolescent of between 17 and 25 years. Bones used for sex determination were not present. No signs of bone pathology were found. Teeth are in good health condition although burrowing animals had destroyed some of them.

Kgaswe B-55 Burial 7(2)

Burial style

The skeleton is of the older individual labeled burial 7. Like burial 7(1), its burial style and provenance cannot be deduced from Denbow's report. The burial was excavated in 1983.

Preservation

The individual is represented by partially complete long bones.

Age

Epiphyses of the long bones are fused and obliterated. Small osteophytes on the distal end of the femur suggest that the remains are of an adult of about 30 to 50 years.

Sex

Based on the size of the head of the femur (44.8 mm) and the head of the humerus (40.9 mm) it is estimated that individual was a male.

Stature

The individual was about 169 ± 2.56 cm tall. The physiological lengths of the femur and tibia were used in combination to estimate the height of this individual.

Bone pathology

There are small osteophytes surrounding the inferior articular surfaces of the femora.

Conclusion

The skeleton is of a middle aged adult male of between 30 and 50 years. The individual was about 166 to 172 cm tall. Small osteophytes were found on the inferior articular surfaces of the femora.

*Kgaswe B-55 Burial 8**Burial style*

This burial was found along the eastern end of the midden in a horizontally flexed position with the head oriented to the west. The grave was discovered during excavations conducted by Denbow in 1983 and the skeleton has been studied previously by Murphy (1996).

Preservation

The skeleton is incomplete. A complete sacrum, left tibia and fragments of lower limbs are the only bones available.

Age

The elements of the sacrum of this individual were not fused. The remains are of a young child of six to eight years old. This estimate was based on a combination of the length of the tibia and the unfused sacrum.

Bone pathology

The remains found have no evidence for pathology.

Conclusion

The individual was a child between six and eight years old with no skeletal lesions.

*Kgaswe B-55 Burial 9**Burial style*

The body had been placed in a horizontally flexed position with the head oriented to the northwest. It was found in the midden in the southeastern area (Denbow 1990). The grave was discovered by Denbow in 1983 and the bones have been examined before by Murphy (1996).

Preservation

The skull is distorted and the mandible is incomplete. The postcranial skeleton is fragmentary and incomplete. The bones appear to have been well preserved in situ but destroyed either during excavation or storage.

Age

Epiphyses of all bones present are fused and obliterated. Permanent teeth are in occlusion and worn and were used to estimate an age range of 40 to 60 years for this individual.

Sex

The sciatic notch is incomplete but is evidently narrow. Tentative results indicate a male individual.

Stature

Stature of this individual was estimated from the physiological length of the tibia. The individual was about 161 ± 3.44 cm in height.

Teeth

There are only 11 permanent teeth. Mandibular left second and third molars have thin calculus deposits and the maxillary left second premolar, second and third molars have small carious lesions on their interproximal surfaces. There is advanced dental wear on almost all teeth. The mandibular left canine has linear enamel hypoplasia.

Conclusion

The remains are of an adult aged 40 to 60 years old, possibly male of about 157 to 165 cm in stature.

Kgaswe B-55 Burial 11

Burial style

This burial was located on the southeastern area of the midden. The skeleton was found in horizontally flexed position with the head oriented to west (Denbow 1990). It was found in 1983 by Denbow and has been studied before (Murphy 1996).

Preservation

The skeleton constitutes of fragments of a scapula, humerus, tibia and fibula only. Burrowing animals had disturbed the grave.

Age

There are no pathological lesions associated with degenerative diseases and it is approximated that the individual was between 20 and 50 years.

Sex

None of the bones used for sex determination was present. The head of the humerus is fragmented and was not measurable.

Bone pathology

There is no evidence for pathology on the bones found.

Stature

Long bones present are incomplete and could not be used to estimate stature. Moreover, the sex of the individual was not determined and this would also hinder the calculation of stature.

Conclusion

The skeleton is too incomplete to allow for a more accurate estimation of age, while determination of sex and stature were not attempted. The bones are of a middle aged adult of between 20 and 50 years.

Kgaswe B-55 Burial 12

Burial style

The grave was found in the central area of the midden. It was in a horizontally flexed position with the head oriented to the west. The grave was discovered in 1983 when Denbow excavated the site (Denbow 1990). The bones have not been studied before, as they do not appear in Murphy's report.

Assessment for bone pathology revealed no lesions.

Preservation

Similar to Burial 11, the remains of Burial 12 are incomplete and not very informative. They comprise of a complete frontal bone, fragments of long bones and other pieces. Burrowing animals had disturbed the burial.

Age

Cranial sutures are closed and partially obliterated. The individual was approximately 30 to 60 years old.

Sex

Sex could not be determined because none of the bones used for sex determination were present.

Bone pathology

The remains have no evidence for pathology.

Conclusion

The bones are of an adult aged between 30 and 60 years whose sex and stature could not be estimated. There are no pathological conditions identified.

*Kgaswe B-55 Burial 13**Burial style*

This burial was found in the central area of the midden, in a horizontally flexed position. The head was oriented to the west (Denbow 1990). The remains were found in 1983 by Denbow and were included in the sample analysed by Murphy (1996).

Preservation

An incomplete, fragmented and distorted adult skull with no postcranial remains represents Burial 13. The postcranial skeleton was present during excavation.

Age

Although cranial sutures were not complete, they indicate an age of between 30 and 60 years as they are fused.

Sex

It was not possible to determine the sex of this individual because the cranium is incomplete.

Bone pathology

Assessment for bone pathology revealed no lesions.

Conclusion

The skull is of an adult whose age was possibly between 30 and 60 years and its sex could not be determined. There were no long bones from which stature could be estimated.

Kgaswe B-55 Burial 14

Burial style

The burial was found on the southern area of the midden. Its head was oriented to the west and the body was in a flexed position (Denbow 1990). It was found in 1983 by Denbow. The skeleton was analysed by Murphy (1996).

Preservation

Most of the bones of this skeleton are present but fragmented. The skull is fragmented and the mandible is complete. There are chop marks on the right tibia.

Age

All epiphyses are fused and obliterated showing that the individual was an adult. Bone spurs found on the right patella and left calcaneus are associated with degenerative conditions and hence the individual is estimated to have been between 40 and 60 years old.

Sex

The sciatic notch is wide and the mandibular corpus is rounded. The individual was female.

Stature

The physiological length of the tibia indicates that the individual was about 156 ± 3.44 cm in height.

Bone pathology

Bone spurs had developed on the anterior surface of the right patella and on the posterior surface of the left calcaneus. The left patella and right calcaneus are both missing and the vertebral column is incomplete and has no indications of osteophytes.

Teeth

Maxillary central incisors are both worn down to the root level but other teeth have little or no wear at all. Mandibular first molars had both been lost antemortem and their sockets have closed. Severe carious lesions were identified on interproximal

surfaces of two mandibular molars and smaller lesions were identified on maxillary first molars, a maxillary third molar and a premolar. All lesions are located on interproximal surfaces.

Conclusion

The remains are of an adult female aged between 40 and 60 years old. The female was about 152 to 160 cm tall. Lesions on the patella and calcaneus suggest that the individual had some degenerative disease. Some of the teeth have carious lesions.

Preservation

Kgaswe B-55 Burial 15

Burial style

The grave was located on the southeastern area of the midden. The skeleton was in a horizontally flexed position with the head oriented to the west (Denbow 1990). It was excavated by Denbow in 1983 and has been studied before (Murphy 1996).

Preservation

The bones are well preserved, but incomplete. The cranium is fragmented and the mandible is missing.

Age

None of the epiphyses are attached and the elements of the sacrum are not fused. Maxillary permanent incisors, a canine and a premolar are in occlusion but the roots of the canine and premolar are not fully developed. The individual is estimated to have been 11 ± 1 years old.

Bone pathology

Cribra orbitalia is present in both orbits and the superior-posterior surface of the skull has small porotic hyperostosis.

Teeth

There are only four maxillary teeth and none of them display any dental disease. The central incisor is shovel shaped.

Conclusion

The remains are of an older child of 10 to 12 years. Cribra orbitalia has been identified on both orbits.

*Kgaswe B-55 Burial 16**Burial style*

This burial was in the southwestern side of the midden. It was flexed with the head oriented to the west (Denbow 1990). Denbow excavated the grave in 1983 (Denbow 1990). Murphy (1996) had two individuals both labeled Burial 16 (one adult and one juvenile) but the current research identified one Burial 16. Murphy's individual was a female but the current analysis identified a male.

Preservation

This is a nearly complete but not very well preserved skeleton. The skull and some of the long bones were fragmented but were possible to reconstruct. The right femur has gnaw marks along the linear aspera indicating that burrowing animals had at some point found their way through to the burial.

Age

Using rib phase analysis, the age of this individual is estimated to have been 20 and 30 years old.

Sex

The sciatic notch is narrow and the mandibular ramus is flexed. The teeth are large and the brow ridges are pronounced. These features indicate a male

Stature

The physiological length of the femur indicates that this male was 167 ± 2.80 cm tall.

Bone pathology

There is evidence of healed trauma, possibly a fracture, on the distal end of the left fibula. The left tibia is very flat and its right counterpart is missing.

Teeth

All 32 permanent teeth are well preserved. There are small dentine patches exposed in all but the third molars. On the maxilla, thin calculus is located on the labial surfaces of all teeth from the left first premolar to the right first premolar and on the buccal surfaces of the right second premolar, first and second molars. In the mandible, teeth from the left canine to the right first molar are affected by calculus.

Conclusion

The remains are of an adult male aged between 20 and 30 years old. He was approximately 164 to 170 cm tall. The individual had suffered trauma on the left fibula, which had healed long before death.

Kgaswe B-55 Burial 17

Burial style

The burial was located in the central kraal not far from Burials 19 and 20. It was in the southern end of the kraal (Denbow 1990). The head was oriented to the west and the skeleton was in a horizontally flexed position. It was found during the 1983 excavation conducted by Denbow. The skeleton has been studied before (Murphy 1996).

Preservation

The skeleton is fragmented and incomplete. The cranium, mandible and long bones are missing.

Age

The ribs and cranium of this individual were not preserved. Age was estimated on basis of pathological conditions associated with degenerative conditions on the vertebrae and pelvis. The individual is estimated to have been 50 to 75 years old.

Sex

The sacrum is long and thin, and the sciatic notch very narrow. The individual was a male.

Bone pathology

Osteophytes had developed on all cervical vertebrae. The axis and C3 are fused to each other but not to the atlas. The right superior articular surface of the atlas and the right inferior articular surface of the axis are eroded indicating some form of arthritic disease. There are small osteophytes on the thoracic vertebrae. The articular surface of the body of S1 shows some possibility of fusion to L5.

Conclusion

The remains are of an adult male aged between 50 and 75 years old. The individual's stature was not calculated because there are no complete long bones. Osteophytes on the vertebrae and pelvis are a result of degenerative disease. The axis and C3 of this individual are fused to each other.

*Kgaswe B-55 Burial 18**Burial style*

Human skeletal remains were found within the daga structure associated with hut 17. The hut is along the southern end of the midden (Denbow 1990). A site label found with the skeleton indicates that the individual was buried in a pot. Unfortunately it is not possible to assess whether this was a primary or secondary burial. The orientation of the body is unknown. Denbow discovered the burial in 1983 (Denbow 1990). It was analysed by Murphy (1996).

Preservation

The skeleton is incomplete and bones are fragmented.

Age

The teeth and mandible are not well preserved. The tympanic bone is not fused to the squama of the temporal bone. Developmental stage of the temporal bone as well lengths of the ulna and radius are consistent with newborn/fetal age.

Bone pathology

The skeleton revealed no signs for pathology.

Conclusion

The skeleton is of a newborn/ fetus and has no indications of pathology.

*Kgaswe B-55 Burial 19**Burial style*

The grave was located just next to Burial 20 along the southern end of the central kraal (Denbow 1990). The skeleton was in a horizontally flexed position, head oriented to the west. It was excavated by Denbow in 1983 and was included in the sample studied by Murphy (1996).

Preservation

The remains comprise of a fragmented skull with no facial bones, and fragments of the lumbar vertebrae only.

Age

The skull is incomplete but cranial sutures are closed and partially obliterated. There are small osteophytes on the lumbar vertebrae. Age of this individual is estimated to have been 40 - 60 years.

Sex

A well-pronounced brow ridge suggests the individual was a male. This diagnosis is only tentative.

Bone pathology

Small vertebral osteophytosis were identified on the lumbar section.

Conclusion

Bones described here are of an adult, possibly male, aged between 40 and 60 years. There are no long bones and therefore stature could not be estimated. Small osteophytes were identified on the individual's lumbar vertebrae.

*Kgaswe B-55 Burial 20**Burial style*

Burial 20 was located along the southern border of the central kraal, very close to Burial 19. It was in a horizontally flexed position with the head oriented to the west (Denbow 1990). The grave was discovered during the 1983 excavations conducted by Denbow and the skeleton has been studied before (Murphy 1996).

Preservation

Despite an incomplete cranium, the skeleton of this individual is in good condition. However, teeth have been lost postmortem.

Age

None of the fontanelles is closed. The tympanic ring is not fused to the petrous part of the temporal bone. In addition, the greater wings of the sphenoid are not fused to the body. Lengths of the humerus and femur indicate that the remains are of a newborn/fetus.

Bone pathology

The skeleton has no evidence for pathology.

Conclusion

The remains are of a newborn/fetus with no pathological lesions.

Conclusion

The remains are of a newborn/fetus with no pathological lesions.

*Kgaswe B-55 Burial 21**Burial style*

The grave was found underneath remains of hut 16 (Denbow 1990). It is difficult to tell if the grave had been dug through a pre-existing hut floor or whether the hut had been built over the grave. It was on the southern part of the midden. The orientation and placing of this burial are difficult to deduce from Denbow's report. The individual was not included in the sample studied by Murphy.

Preservation

The skeleton is fragmented and incomplete.

Age

The two halves of the mandible are not fused. Length of the femur places this skeleton within the newborn/fetal age range.

Bone pathology

There is no evidence for pathology on this skeleton.

Conclusion

The remains are of a newborn/fetus with no pathological conditions.

*Kgaswe B-55 Burial 23**Burial style*

The burial was located east of Burial 25, in the center of the midden. It was in a horizontally flexed position with the head oriented to the west (Denbow 1990). Denbow excavated the grave in 1983 and the remains have been studied before (Murphy 1996).

Preservation

The cranium is incomplete. The right ulna and partially complete tibiae are the only postcranial bones present.

Age

The length of the ulna suggests that the remains are of a newborn/fetus.

Bone pathology

The remains have no evidence for pathology.

Conclusion

The remains are of a newborn/fetus with no pathological lesions.

*Kgaswe B-55 Burial 24**Burial style*

This individual had been buried inside the central kraal, along its eastern edge (Denbow 1990). It was horizontally flexed with the head oriented to the west. The burial was discovered during the 1983 excavation conducted by Denbow. The skeleton has been studied before (Murphy 1996).

Preservation

The skeleton is incomplete but bones present are in good condition. The calvarium is nearly complete and the mandible is missing.

Age

Epiphyses of the elbow and hip are fused and obliterated; those at the ankle, knee and shoulder are fused but not obliterated. The acromion and iliac crest are not fused. Teeth were, unfortunately not preserved. The individual was aged between 15 and 20 years.

Bone pathology

The remains have no signs for pathology.

Conclusion

The individual was aged between 15 and 20 years. No attempts were made to determine its sex. There are no pathological conditions found on the bones.

*Kgaswe B-55 Burial 25**Burial style*

The burial was located within the central area of the midden, to the west of burial 23. A posthole was located just next to the head. The head was oriented to the west. It was in a horizontally flexed position (Denbow 1990). It was found in 1983 during excavations conducted by Denbow and the skeleton has been studied before (Murphy 1996).

Preservation

This is yet another incomplete skeleton. It constitutes of cranial fragments, an incomplete left femur and a fragment of the right iliac bone.

Age

Cranial sutures are partially obliterated and the individual was probably 30- 60 years old. *living stature of this individual was estimated to be 158 ± 2.56 cm.*

Sex

A narrow sciatic notch indicates that the individual was a male.

Stature

This individual's stature was not calculated because none of the long bones present are complete. *161 cm in height. There are no indications of pathology on the*

Bone pathology

The skeleton has no evidence for pathology.

Conclusion

The individual was a middle aged adult male of between 30 and 60 years old. There are no signs of pathology on the skeleton. *central skull, on the northern side. The*

*Kgaswe B-55 Burial 26**Burial style*

The grave was located in the center of the site within the midden (Denbow 1990). The body had been placed in a horizontally flexed position with the head oriented to the west. Denbow excavated the grave in 1983 and the skeleton has been studied previously (Murphy 1996).

Preservation

The skull is fragmented and the mandible is missing. The axial skeleton and upper limbs are missing and the pelvic girdle and lower limbs are incomplete.

Age

The sphenoccipitalis is closed and there are no lesions commonly associated with degenerative conditions. Unfortunately no good age makers were preserved. The individual was an adult of 30 to 50 years old. *missing have been lost postmortem. Six of*

Sex

The sacrum is short and broad and the sciatic notch is wide, thus indicating a female. *Conclusion*

The remains are of a child aged between nine and 11 years. Its skeleton displays no signs of pathology. Enamel hypoplasia was identified on six mandibular teeth.

Stature

Using a combination of the physiological lengths of the femur and tibia, the maximum living stature of this individual was estimated to be 158 ± 2.56 cm.

Bone pathology

There is no evidence for pathology on the skeleton.

Conclusion

The remains are of an adult female of about 30 to 50 years. She was approximately 155 to 161 cm in height. There are no indications of pathology on the skeleton.

*Kgaswe B-55 Burial 27**Burial style*

The grave was located within the central kraal, on the northern side. The individual was in a flexed position. The head was oriented to the west. The grave was unearthed in 1983 by Denbow (Denbow 1990) and the remains have been studied before (Murphy 1996).

Preservation

The postcranial skeleton of this individual was not found. The skull is fragmented and the face is missing. A nearly complete mandible is present

Age

A maxillary left second molar is below occlusion and third molars are not erupted. Anterior permanent teeth, premolars and the first molars were in occlusion at the time of death. The individual is estimated to have been 10 ± 1 years old.

Bone pathology

There are no pathological lesions identified on this individual.

Teeth

There are 19 teeth present and those missing have been lost postmortem. Six of the mandibular teeth (left premolars and the first and second molars and the right first and second molars) have faint linear enamel hypoplasia.

Conclusion

The remains are of a child aged between nine and 11 years. Its skeleton displays no signs of pathology. Enamel hypoplasia was identified on six mandibular teeth.

Tables 4.1, 4.2, 4.3 and 4.4 present brief summaries of the results obtained in the analysis of skeletons. The tables show individuals of 0-5 years, 5-10 years, 10-20 years 20+ years respectively. Distinctive notes include burial style (*italics*) where information was available and skeletal lesions found.

Table 4.1 Summary of individuals aged 0-5 years

No.	Age (years)	Preservation	Distinctive notes
Toutswemogala			
1	Newborn	Complete	<i>Pot burial</i>
5	3-5	Incomplete	
7	3-5	Complete	<i>Associated with metal objects</i>
8	2-4	Incomplete	Porotic hyperostosis + bifid rooted canine
10	1-2	Partially complete	
11	0-0.5	Partially complete	
12	0-0.5	Incomplete	
18	3-5	Incomplete	
20	3-5	Incomplete	
21	1-1.5	Incomplete	
23	3-5	Partially complete	
24	3-5	Incomplete	
26	1-2	Incomplete	Enamel hypoplasia
27	0-0.5	Incomplete	
28	2-4	Incomplete	
Taukome			
3	0-0.5	Complete	<i>Pot burial</i>
Bosutswe			
01/1	0-0.5	Complete	<i>Flexed</i>
7	1.5-2	Complete	<i>Flexed</i>
8	3-5	Complete	<i>Flexed, grave stones, pot- enamel hypoplasia</i>
9	Newborn	Incomplete	<i>Flexed</i>
Thatswane			
3	3-5	Incomplete	<i>Flexed- enamel hypoplasia</i>

Table 4.1 continued

No	Age	Preservation	Distinctive notes
Dikalate			
1	0-0.5	Complete	<i>Flexed</i>
Kgaswe B-55			
18	Newborn	Incomplete	
20	Newborn	Partially complete	Enamel hypoplasia
21	Newborn	Incomplete	
23	Newborn	Incomplete	

Table 4.2 Summary of individuals aged 5-10 years old

No.	Age (years)	Preservation	Distinctive notes
Toutswemogala			
2	5-7	Complete	Cribriform orbitalia + porotic hyperostosis
3	6-8	Incomplete	Cribriform orbitalia + enamel hypoplasia
4	6-8	Incomplete	<i>Isolated skull burial</i>
6	9-11	Complete	<i>Pot-</i> Spina bifida occulta + enamel hypoplasia
9	7-9	Partially complete	
13	7-9	Partially complete	
14	5-7	Partially complete	Healed trauma on right femur
15	7-10	Partially complete	
29	6-10	Incomplete	Enamel hypoplasia
31	9-11	Incomplete	
Taukome			
4	5-7	Incomplete	<i>Flexed</i>
Bosutswe			
4	7-9	Complete	<i>Flexed, grave stones</i>
6	7-9	Complete	<i>Flexed, grave stones- dental caries</i>
Thatwane			
4	8-10	Partially complete	<i>Flexed</i>

Table 4.2 continued

No	Age	Sex	Preservation	Distinctive notes
Kgaswe B-55				
4	40-60	5-10	Incomplete	<i>Flexed- osteophytes + dental caries and wear</i>
6	40-60	6-8	Incomplete	<i>Flexed, clay pot</i>
8	40-60	6-8	Incomplete	<i>Flexed- osteophytes + calcified enamel of teeth</i>
27		9-11	Incomplete	Enamel hypoplasia

Table 4.3 Summary of individuals aged 10 –20 years

No.	Age	Sex	Preservation	Distinctive notes
Toutswemogala				
16	10-12		Incomplete	Dental modification + cribra orbitalia
17	10-12		Incomplete	
Taukome				
6	15-18		Incomplete	<i>Maxilla exposed by animals</i>
Bosutswe				
11	13-15		Complete	<i>Flexed, pots -spina bifida occulta, enamel hypoplasia</i>
13	12-14		Complete	<i>Flexed, pot- enamel hypoplasia</i>
Thatswane				
6	10-12		Incomplete	<i>Flexed – enamel hypoplasia</i>
Kgaswe B-55				
1	15-20		Incomplete	<i>Flexed- enamel hypoplasia</i>
3	12-14		Incomplete	<i>Flexed</i>
15	10-12		Incomplete	Cribra orbitalia
24	15-20		Incomplete	<i>Dental caries + enamel hypoplasia</i>

Table 4.4 Summary of adults aged 17 years and over

No.	Age (y)	Sex	Stature	Preservation	Distinctive notes
Toutswemogala					
19	40-60	M	-	Incomplete	Burnt, osteophytes
22	40-50	M	169-175	Partially complete	Osteophytes
25	30-50	F	167-173	Partially complete	<i>Flexed - osteophytes</i>
30	20-40	-	-	Incomplete	

Table 4.4 continued

No	Age	Sex	Stature	Preservation	Distinctive notes
Taukome					
1	40-60	M	162-171	Incomplete	<i>Flexed-</i> osteophytes + dental caries and wear
2	40-60	F	-	Incomplete	<i>Flexed-</i> deformed mandible, caries, osteophytes
5	40-60	M	-	Incomplete	<i>Flexed-</i> osteophytes + calcified sternal rib ends
Bosutswe					
3	30-40	M	167-173	Complete	<i>Flexed-</i> grave stones, fracture + dental caries
5	17-20	M	-	Complete	Spina bifida occulta, enamel hypoplasia, caries
12	50-75	M	167-173	Complete	<i>Flexed-</i> grave stones, DISH +dental caries
Thatswane					
5	40-60	F	165-171	Incomplete	<i>Flexed-</i> osteophytes
Mosu 3					
1	17-20	M	-	Complete	<i>Flexed, clay pots</i>
Thataganyane					
1	20-40	M	165-171	Incomplete	
Serowe Hill					
1	20-40	F	-	Incomplete	Dental caries
Swaneng Hill					
1	20-30	M	-	Incomplete	
Kgaswe B-55					
2	30-50	F	148-154	Partially complete	<i>Flexed, clay pots</i>
5(1)	18-22	M	-	Partially complete	Enamel hypoplasia
5(2)	30-50	M	170-176	Incomplete	Osteophytes + enamel hypoplasia
7(1)	17-25	-	-	Incomplete	
7(2)	30-50	M	166-172	Incomplete	Osteophytes
9	40-60	M	158-164	Incomplete	Dental caries + enamel hypoplasia
11	20-50	-	-	Incomplete	
12	30-60	-	-	Incomplete	
13	30-60	-	-	Incomplete	
14	40-60	F	153-159	Incomplete	Bone spurs + dental caries
16	20-60	M	164-170	Partially complete	Healed fracture
17	50-75	M	-	Incomplete	Osteophytes, axis and C3 fused
19	40-60	M	-	Incomplete	Osteophytes
25	30-60	M	-	Incomplete	
26	30-50	F	155-161	Incomplete	