



By André Marais

To wake up every day with some kind of body pain or stiff muscles is a common occurrence as one grows older. This can be attributed to a variety of conditions; some are related to an increase in age, while others may have a more sinister cause. It is therefore always important to consult a doctor, should you be suffering from muscle, bone or joint pain, regardless of the intensity, location and duration of the episode.

Bones are constantly growing. This might seem a bit farfetched, but old bone cells are continuously being replaced by new ones, a process called "bone remodelling". With this lifelong turnover, you replace your skeleton every ten years! Bones need calcium and phosphorus for remodelling to be effective. Unfortunately, loss of bone density and strength starts from as early as 30 years old, when bone loss outpaces the growth of new bone. This process may eventually lead to osteoporosis and an increased risk of fractures. Osteoporosis is more common in women, and accelerates after menopause. Oestrogen has a protective effect on bone remodelling; hence, hormonal treatments are often used in menopausal or post-menopausal women, if indicated, to limit the progression. Similarly, low testosterone levels in older men



**Samesteller van
afdeling oor gewrigte/
Compiler of section
on joints:
Eleine Roets**

Die ou grappie beweer dat 'n mens weet hy het in die hemel aangekom as hy die oggend sonder pyne opstaan.

Dit is ongelukkig waar dat gewrigspyne vir baie seniors 'n onwelkome oudagervaring is. In hierdie spesiale afdeling besin ons oor 'n klompie verskillende gewrigte en die siektes en skete van die skelet. Ons leer die verskillende toestande verstaan en verneem van nuwe denkrigtings, medikasies en metodes van voorkoming en behandeling.

Ons skep moed as ons hoor van leefstylverandering, diëte of nuwe mediese ingrepe wat die lewe makliker maak. In Suid-Afrika is ons dankbaar vir wonderlike spesialiste wat toegewyd op hulle vakgebied byhou.

Maar die groot uitdaging bly dat ons van jongs af moet leef, oefen en eet met die oog op die oudag – in die hoop dat ons van sommige van die skete bewaar sal bly.

This special section concentrates on the joints in our bodies and the various aches, pains and problems we may experience. We gratefully acknowledge the wonderful skills of dedicated medical specialists who keep on researching and experimenting in order to find solutions – be it through medication, operations or prostheses.

JOINT PAIN

AND AGEING



are cited as a cause. Testosterone is converted by the body into bone-preserving oestrogen, and low levels require treatment. Lack of essential calcium in the diet will prevent bone stores from being replenished and bones become brittle. Calcium is important for many organs, including the heart, as well as muscles and nerve cells. Lack of vitamin D can lead to weak bones and increased bone loss. Additionally, vitamin D helps with the absorption of calcium. Various over-the-counter products are available, which contain combinations of calcium, vitamin D and phosphorus. Thyroid disease should be excluded as a cause, and smokers need to quit, since many studies have shown a higher risk of fractures in those who smoke compared with non smokers. It is worthwhile to discuss these issues with your doctor so that he or she may send you for tests, if indicated.

As people age, their bones become affected, and cartilage and connective tissue become weaker. This presents as constant joint pain, especially in the hips, knees, hands and feet. The cartilage inside the joints becomes thinner, resulting in a less resilient joint, which is more prone to damage because the surfaces do not slide smoothly over one another as they used to. This process may lead to osteoarthritis and stiffening of the connective tissue in the ligaments, and influences the range of motion of the affected joint. Osteoarthritis can therefore be seen as a “wear

and tear” disease, in which bone rubs against bone. It usually occurs after the age of 50 or in those with a family history of arthritis. Previous joint trauma, especially those with old sports-related injuries, shows signs of arthritis at an earlier age. Cold temperatures typically worsen the pain and stiffness, and heat packs may bring temporary relief. Osteoarthritis needs to be distinguished from rheumatoid arthritis. Although many of the symptoms of osteoarthritis and rheumatoid arthritis overlap, rheumatoid arthritis is part of the autoimmune group of diseases. Here the body produces antibodies against its own tissues, literally destroying itself. Autoimmune diseases are diagnosed with blood tests, and occur much earlier in life. They require specific treatment, in addition to anti-inflammatory and pain medication.

Severe osteoarthritis of the hip requires hip replacement surgery if anti-inflammatory and analgesic agents are ineffective. Hip replacement surgery has been performed since the 1960s and is one of the most successful operations in medicine. The damaged part is replaced with a metal stem, which is “cemented” into the bone, and articulates on a plastic or ceramic socket. There is no absolute age for this procedure, and it can be performed on people from 50 to 80. Cases are assessed individually, but surgery is usually indicated if the hip pain limits everyday activities (walking or bending), the pain persists while

resting, and stiffness limits the ability to move or lift the leg. Hip replacements can last more than 20 years, and only a few patients require a repeat operation.

Knee replacement surgery is equally effective, and is considered a safe procedure. It provides dramatic pain relief in more than 90% of patients. Most knee replacement surgery takes place because of osteoarthritis. If a total knee replacement is done, the thighbone is covered with a metal cap and the shinbone is encased in plastic. The under surface of the kneecap is also covered in plastic. This allows for a smooth articulating joint. Depending on the degree of osteoarthritis in the knee, it is not always necessary to replace the whole joint. The surgeon may choose to replace only the part that is damaged (partial knee replacement). Knee replacement procedures typically involve a hospital stay of three to five days, followed by physiotherapy for eight weeks. Knee replacements last at least ten years, with up to 80% lasting for 20 years or more.

Complications for hip and knee replacements include infection (2%), blood clots, problems with the implant, and pain as a result of damage to the blood vessels during the operation. Fortunately these complications are rare. Most people experience marked improvement in their quality of life and are able to resume normal activities.

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