

APPENDIXES

APPENDIX A: FEFARI

APPENDIX B: Checklist for Readiness for Oral Feeding



FEEDING EVALUATION FORM FOR AT-RISK INFANTS (FEFARI)

Karina Uys

Patient information

Date of evaluation: _____

Patient number

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 1-7

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Ballard score: _____ Weeks 9 – 10 Birth weight: _____ 13-15
 Current gestational age: _____ weeks 11-12 Current weight: _____ 16-18

1. MEDICAL HISTORY

	1 No	2 Yes	Comment	
1. Prematurity				19
2. Neurological problems				20
3. Craniofacial anomalies				21
4. Feeding problems: family history				22
5. Polyhydramnios				23
6. Placenta abruptio/previa				24
7. Cord prolapse/around neck/knotted				25
8. Meconium aspiration				26
9. RDS/BPD				27
10. Surfactant therapy				28
11. Mechanical ventilation			Days	29
12. Asphyxia				30
13. Pneumonia				31
14. Cardiovascular condition				32
15. IVH				33
16. Apgar - under 7			/1 min /5 min /10 min	34
17. Tube feeding			Days	35
18. Infection:TORCH			E.g.	36



2. CURRENT STATE/BEHAVIOUR

	1 No	2 Yes	Comment	
Quiet				37
Allert				38
Lethargic				39
Medication				40
Hyperbilirubemia				41
Respiratory problems				42
Ventilation dependant				43
Oxygen dependant				44
Dusky spells				45
Pneumonia				46
Stridor				47
Chronic infection				48
Noisy breathing				49
Coughig/choking				50
Trouble breathing during feeds				51
Apnoea				52

3. PHYSICAL EXAMINATION

	1 No	2 Yes	Comment	
Symmetrical				53
Normal tone				54
Hypertonic				55
Very floppy / hypotonic				56
Excessive neck and trunk extensions				57
Dismorphic features:				58
Cleft palate - overt - submucosal				59
Position whilst feeding: -excessively flexed / floppy -neck extension -supine				60



4. ORAL FEEDING HISTORY

		1		2		3	
Duration of feed: in minutes	20 or less		30 - 40		45 or plus		61
Endurance of oral feeding	Manages whole feed		Manages more than half of the feed		Manages less than half of the feed		62
Feeds better when	Alert, eyes open		Less alert, eyes closed		Night-time		63
Feeding position	Reclined		Semi-reclined		Upright		64
Intervals between feeding times	3 hourly		4 hourly		2 hourly		65
Method of feeding	Cup / Breast		Bottle		Nasogastric		66

5. MOTHER-INFANT INTERACTIONS: DURING FEEDING

	1 No	2 Yes	Comment	
MOTHER: Present				67
- Eye contact				68
- Talks to infant				69
- Touches infant				70
- Responds to cues from infant				71
- Secure, confident				72
INFANT: Present				73
- Relaxed/calm				74
- Alert/wakeful				75
- Active				76
OVERALL: Pleasurable interaction				77

	Normal structure/behaviour/functioning
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Abbreviations:

N	Normal	BPM	Breaths per minute
IVH	Intra ventricular haemorrhage	GER	Gastro-esophageal reflux
BPD	Bronchopulmonary dysplasia	T	Toxoplasmosis
RDS	Respiratory Distress Syndrome	O	Other e.g.syphilis
NS	Nutritive Sucking	R	Rubella
NNS	Nonnutritive Sucking	C	Cytomegalovirus
NG	Nasogastric	H	Herpes simplex
OG	Orogastric		



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6. EVALUATION OF FEEDING PROCESS:

➔ ORAL STRUCTURES AT REST

	1	Normal	2	Deviant	
LIPS		- Symmetrical		- Asymmetrical	9
		- Closed		- Open	10
		- Soft		- Retracted	11
Reflex: Rooting		- Eager		- Inconsistent / Hyperactive - Absent	12
Tone		- Normal		- Hypertonic - Hypotonic	13
Reaction in touch		- Normal		- Hypersensitive - Hyposensitive	14
CHEEKS:		- Symmetrical		- Asymmetrical	15
Tone		- Normal		- Hypotonic	16
Sucking pads		- Present		- Absent	17
JAW:		- Symmetrical		- Asymmetrical - Micrognasia	18
Reflex: Biting		- Present		- Absent - Tonic biting reflex	19
PALATE: Hard		- Symmetrical		- Asymmetrical - High arch - Narrow - Cleft	20
VELUM		- Symmetrical		- Asymmetrical - Cleft overt/submucosal	21
Reflex: Gag		- Present		- Absent - Hyperactive - Hypoactive - Anteriorly displaced	22
TONGUE: SHAPE		- Symmetrical		- Asymmetrical	23
		- Rounded tip		- Excessively rounded - Excessively pointed	24
		- Thin, Flat		- Retracted - Elevated	25
Tone		- Normal		- Soft/Hypotonic	26
Size		- Normal		- Macroglossia	27
Reflex: Sucking		- Present		- Absent - Depressed	28
Reflex: Swallowing		- Present		- Absent	29
Reaction to touch		- Normal		- Hypersensitive - Hyposensitive	30



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➔ **FUNCTIONING OF ORAL STRUCTURES**

6.1 NON-NUTRITIVE SUCKING (NNS)

	1	Normal	2	Moderately disorganised	3	Severely dysfunctional	
LIPS: Pursing:		- Initiates		- Excessive		- Absent	9
Closure:		- Initiates		- Weak		- Absent	10
		- Maintains		- More than 2 min		- Less than 2 min	11
TONGUE movement		- Symmetrical		- Asymmetrical		- Absent	12
		- Anterior - Posterior		- Protrusion - Elevated tip		- Retracted - Very weak	13
Sucking bursts		- Appropriate pauses		- Prolonged pauses		- Absent	14
				- Short pauses		- Very weak	
Rate of movement		- 2/sec		- Incoordinated		- Absent	15
Stress symptoms		- Absent		- Present			16
During NNS		- No change		- Decreases		- Increases	17

Breathing rate

Baseline	<input type="text"/>	BPM	18-19
During NNS	<input type="text"/>	BPM	20-21

Heart rate

Baseline	<input type="text"/>	Beats/min	22-24
During NNS	<input type="text"/>	Beats/min	25-27



Patient number

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6.2 NUTRITIVE SUCKING

Bottle 1

	9
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6.2.1. ORAL PREPARATORY/ORAL PHASE

	N o r m a l		D e v i a n t			
	1	2	Moderate Disorganised	3		Severe Dysfunctional
LIPS: Pursing	- Initiates		- Retraction - Excessive		- Absent	9
Closure: Initiates	- Efficient		- Weak		- Absent	10
	Maintains	- Efficient	- More than 2 min		- Less than 2 min	11
Loss of liquid	- Minimal		- Moderate		- Extensive	12
Movement	- Rhythmic		- Disrhythmic		- No rhythm	13
		- Coordinated	- Incoordinated		- Absent	14
JAW: Degree of depression	- Consistent		- Inconsistent - Difficult to initiate		- Atonic biting reflex	15
Movement	- Rhythmic		- Arrhythmic		- Absent	16
		- Normal	- Minimal excursion		- Atonic biting reflex - Absent - Jaw Thrust	17
Rate of movement	- 1/sec		- Lack of rate change between NS-NNS		- Absent	18
TONGUE: Grooving	- Central		- Bulging		- Absent/Flaccid	19
Movement	- Symmetrical		- Asymmetrical		- Absent	20
		- Anterior-posterior	- Protrusion, without interruption of function		- Protrusion-excessive before and after nipple insertion	21
		- Anterior-posterior	- Elevated tongue tip		- Retracted	22
		- Strong: Rhythmic	- Arrhythmic		- Very weak	23
Sucking burst	- Appropriate pauses		- Prolonged (5-20 sucks) - Short (less than 3 sucks)		- No sucking bursts	24
Flow rate	- Sufficient		- Poor		- No flow	25
Bolus Formation	- Efficient		- Slow		- Absent	26
Swallowing	- Coordinated		- Incoordinated		- Absent	27
		- Timely	- Delayed		- Absent	28
		- Once/ Twice	- Multiple		- No swallowing	29



6.2.2 PHARYNGEAL PHASE

	1	Normal	2	Deviant	
Laryngeal/hyoidbone elevation		- Present		- Absent	30
Nasopharyngeal Reflux		- Absent		- Present	31
Voice quality		- Clear		- Gurgly	32
Suck, Swallow Respiratory sequence		- Effortlessly		- Associated with stress	33
Breathing rate: Pre-feeding _____ BPM During-feeding _____ BPM Post feeding _____ BPM		- N(30-80 BPM) - No change		- Tachypnoea - Bradypnoea Difference pre + post ↑10BPM ↓10BPM	34
Heart rate: Pre-feeding _____ Beats/min During-feeding _____ Beats/min Post feeding _____ Beats/min		- Full term 70-170 Beats/min - Preterm 140-160 Beats/min		- Tachycardia - Bradycardia: ↓ 80 beats/min	35

➔ Stress symptoms: Moderate

No 1	Yes 2		
		- Fatigue	36
		- Yawning	37
		- Sneezing	38
		- Hiccupping	39
		- Flared nostrils	40
		- Sweating	41
		- Crying/Fussiness	42
		- Averting gaze	43
		- Fisting of hands	44

➔ Stress symptoms: Severe

No 1	Yes 2		
		- Falling asleep	45
		- Coughing	46
		- Choking	47
		- Vomiting	48
		- Noisy Breathing	49
		- Colour change	50
		- Chest Retraction	51
		- Stridor	52
		- Actively refusing nipple	53

6.2.3. OESOPHAGEAL PHASE

	1 No	2 Yes	Comment	
Emesis: during feeding				54
after feeding (↑ 30 min)				55
after feeding (↓30 min)				56
Projectile vomiting				57
Regurgitation/GER				58
Truncal arching				59



7. GENERAL INFORMATION

Feeding time _____ Minutes

60-61

Reason for ending the feed:

Changes during assessment that had a positive outcome

Changes during assessment that had a negative outcome

8. ADDITIONAL INFORMATION

Instrumental evaluation

8.1 Video fluoroscopic evaluation:

Oral Phase

Pharyngeal phase:

Esophageal phase:

8.2 Pulse Oximetry

Prefeeding	%	62-63
Midfeeding	%	64-65
Postfeeding	%	66-67

8.3 Cervical Auscultation:



Patient number

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6.2 NUTRITIVE SUCKING (CONTINUED)

Cup

6.2.1. ORAL PREPARATORY/ORAL PHASE

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		2	Moderate Disorganised	3	Severe Dysfunctional		
LIPS: Pursing		- Initiates		- Retraction - Excessive		- Absent	9
Closure: Initiates		- Efficient		- Weak		- Absent	10
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		- Sneezing	38
		- Hiccupping	39
		- Flared nostrils	40
		- Sweating	41
		- Crying/Fussiness	42
		- Averting gaze	43
		- Fisting of hands	44

⇒ Stress symptoms: Severe

No	Yes		
1	2		
		- Falling asleep	45
		- Coughing	46
		- Choking	47
		- Vomiting	48
		- Noisy Breathing	49
		- Colour change	50
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Postfeeding	%	66-67

8.3 Cervical Auscultation:



FEEDING EVALUATION FORM FOR AT-RISK INFANTS (FEFARI)

Karina Uys

Patient information

Date of evaluation: _____

Gestational age: _____

SUMMARY OF INFORMATION

MAIN METHOD OF FEEDING

BOTTLE

BREAST

CUP

OVERALL FUNCTIONING LEVELS

	ADEQUATELY	ADEQUATE BUT REDUCED FUNCTION	INTERFERES WITH FUNCTION	NON-FUNCTIONAL
Oral phase				
Pharyngeal phase				
Esophageal phase				
Conclusion	Normal	Mild impairment	Moderate impairment	Severe impairment

MAIN PROBLEM/S

DIAGNOSIS

RECOMMENDATIONS

SPEECH THERAPIST

APPENDIX B

Readiness for Transfer to Oral Feeding

	Yes/No
Respiratory: Non-laborious breathing	
Breathing Rate less than 60/min	
O ₂ needs not more than 40%	
Cardiological: Stable	
Gastric: Sufficient bowel sounds	
Tolerate bolus feeds (2-3 hourly)	
Neurological: Gestational age of 34 weeks +	
Swallowing reflex present	
Nutritional: Sustained weight gain	
State & Behaviour: Maintain quiet, alert state	
Signs of endurance	
Communication clues for approach/withdrawal	

Compiled by Karina Uys