Management Pathway for Cleft Patients

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Cleft lip and palate

- 1 in 800-1000
- Birth rate 8.6/1000
- Census and Statistics Department SAR 2014
  70 new cases
Problems

- Physical appearance
- Speech development
- Hearing
- Dental occlusion
- Psychology
- Syndrome
Multidisciplinary team

- Obstetrician
- Plastic surgeon
- ENT surgeon
- Dental surgeon
- Nurses
- Patient
- Speech therapist
- Pediatrician
- Clinical psychologist
- Medical social worker
- Peer group

Patients and Parents
Management Protocol

- Lip repair
- Palate repair +/– ENT
- Lip-nose revision
- Speech training +/– VPI surgery
- Dental assessment
- Orthodontic and orthognathic surgery
- Alevolar bone graft

Birth 6 m 1 y 2 y 5 y 10 y adult
Cleft Clinic

- 2 sessions per month
- Outpatient clinic S4
- Average 20-25 patients per session
- Plastic surgeon
- Dental surgeon
- Speech therapist
- (ENT surgeon)
1\textsuperscript{st} Consultation

- 2-4 weeks after birth
- Treatment Plan
- Advices on feeding
- Screen for other anomalies
- Counselling
Goal of Cleft palate repair

- Speech
- Dental occlusion
- Hearing
- Facial growth
Pathway

- Medical history + Workup
- Body weight >10 lbs
- Cleft lip 3 months
- Cleft palate 6-12 months (up to 18 months for complicated medical history or airway problem)
Admission

- Admit 9am (Cleft palate) 1pm (Cleft lip)
- Seen by anaesthetist + preoperative workup
- +/- ENT consultation + Hearing test
- Consent
- One parent can accompany
- No blood test
- Observation 4x day
Day 0 Surgery

- +/- Myringotomy + Grommet insertion
- Elbow splint
- Nasal splint after rhinoplasty
- Infra-orbital nerve block for pain control
- Paracetamol suppositories 10-15mg/kg every 4-6 hours
- Antibiotics for one day
- Hourly observation for 6 hours then 4 hourly
- Feeding with syringe – clear fluid to milk
- +/- Intensive Care Unit
Day 1

- Syringe feeding
- Paracetamol 10-15mg/kg every 4-6 hours as needed (cannot sleep, agitated)
- Inspect wound
- Observation 4x day
- Titrate intravenous fluid
Discharge

- Adequate oral intake
- No bleeding
- Not in pain
- No fever
- Home with paracetamol
- Milk diet for 1-2 weeks for puree diet
- Nasal splint for 3 months
Follow up

- On Day 7 if off stitches
- Next Cleft Clinic
- Progress
Velopharyngeal incompetence

- 20% cleft palate
- Impairment of velar muscle movement
- Short palate
- Hypernasal speech and nasal regurgitation
- Speech therapy training
- Surgery
Speech Training

- 2-2.5 Years old
- Speech assessment for hypernasality (velopharyngeal incompetence) or articulation problem
- Speech training
- Complete before 6 years old
Nasoendoscopic assessment

Sex:  Age:  
D.O.B:  
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Comment:
Dental Assessment

- Dental hygiene
- Alveolar bone graft
- Orthodontic treatment
- Orthognathic surgery
Orthodontic and Orthognathic Surgery

- Cleft palate patients will have mal-alignment of teeth and jaw position.
- Orthodontic treatment can alignment the dentition.
- Orthodontic treatment usually commences when permanent teeth have erupted.
- Orthognathic surgery can correct occlusion of jaw and facial profile.
- Orthognathic surgery can be carried out after facial growth has completed.
- Orthognathic surgery requires perioperative orthodontic treatment.
"The work will not have completed until the child has grown up......."