

of life; maintenance of function- restoring pretraumatic functional occlusion and mastication and restoration of form-facial appearance^{1,4}. Many techniques have evolved for treating fractures of the middle third of facial skeleton beginning with the now-not so popular methods of external fixation, which prevailed before the advent of antibiotics, to modern craniofacial surgical techniques^{1,5}. Ipsen (1933) first proposed internal K wire fixation of facial fractures. Dingman (1939) popularized rubber band traction to immobilize difficult fractures of the midface; Adams (1942) used direct internal wiring and suspension techniques. Dingman subsequently emphasized sequential suspension of the reduced fragments to the nearest superior stable buttress. Ferraro and Berggren (early 1970s) suggested rigid internal fixation with immediate bone grafting for the repair of complex facial fractures, and since that time the practice has become widespread^{1,3}. Manson believed that the mandible is the principal structural pillar of the lower midface upon which LeFort fractures can be reduced and stabilized. Midface retusion can be averted by placing the maxilla in proper occlusion with the mandible using MMF and then stabilizing the midfacial buttresses with plates¹. Craniofacial suspension in conjunction with intermaxillary fixation is the time honored method of LeFort fracture management and also an adjunct in panfacial trauma to simultaneously stabilize fractured mandibular segments^{1,2,6,7}. Its main indications are⁴: (1) complex avulsive injuries^{4,6} (2) compromised anteroposterior or vertical bony support that obstructs the airway^{2,6} (3) old and unfit patients⁶, (4) when internal suspension wiring is not possible^{3,6}. There are four methods of External skeletal fixation which are in general use at the present time: (1.) Plaster of Paris head cap; (2.) Halo frame; (3.) Box frame; (4.) Levant frame.

In Case 1, External skeletal fixation was done as internal suspension wiring was not possible due to lack of stable zygomatic arch and to avoid any unwanted movement at craniofacial junction w.r.t. associated NOE fracture. **In Case 2**, the patient was deferred for internal suspension wiring to avoid any undue movement at NOE region. ORIF was done for mandibular fracture and external Rigid fixation using POP head frame to mandibular external pins (in Case 1) and modified upper arch bar for midface fracture (in Case 2) was done under LA in OPD.

Craniofacial suspension using POP head cap is a quick, simple and

efficient immobilization of middle third fracture with/without associated mandibular fracture^{3,4}. It is preferable to apply the External skeletal fixator between 6th and 12th day, when the swelling has subsided, however, early application is not contraindicated. Reduction must be done before the 15th day as after this period great difficulty may be experienced with reduction. Although the patients had to sleep on their backs, they were comfortable and there were no major complications⁴. It is vital to keep the wire cutter at the bedside at all times⁵.

This technique had many advantages³: (1) easy and simple method, can be used by beginner maxillofacial surgeons; (2) cost effective and good patient compliance; (3) can be done in OPD / ward, when OT is not available, thus reducing the operating time and hospital stay of the patient; (4) any loosened part of apparatus can be tightened, if loose, or replaced, if damaged, during healing period; (5) avoids complications countered in internal suspension wiring viz., damage to the eye, facial nerve and failure to pass the wire around the zygomatic arch; (6) prevents collapse of the facial tissue normal dimensions, and so preserves the tissue planes to provide easier dissection at later reconstructive surgery, which makes a better outcome possible.

CONCLUSION

It can be concluded that the advent of newer techniques does not outweigh the importance of time honored standard techniques. This technique empowers the maxillofacial surgeons to provide a cost effective i.e., economical, efficient and immediate treatment of complex maxillofacial trauma under OPD settings.

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