



Fig. 2. Alveolar cleft.

The etiological factors of bone defects were 65% due to trauma, and from these 65% traumatic causes, 35% were due to RTA, 10% were bullet injuries and 20% were shell injuries. Alveolar clefts causes occur in 10% and odontogenic tumors of the mandible in 25% of cases (Table4). The immediate method of reconstruction was used in 5 patients (25%), mainly used in treatment of odontogenic tumor lesions. The delayed reconstruction due to trauma and other causes used in 15 patients (75%).

The method of immobilization of the mandible to the maxilla was done by intermaxillary fixation to the patients with mandibular defects in 9 patients (45%), while the zygomatic defects, orbital defects and maxillary defects did not need intermaxillary fixation.

Table 4. Causes of the bone defects

Causes of the defects	No.	%
Road Traffic Accidents	7	35
Bullet Injury	2	10
Shell Injury	4	20
Odontogenic Tumors	5	25
Alveolar cleft	2	10
Total	20	100

Complications associated with donor site harvesting procedure include pain in 1 patient (5%) persist for about 4 weeks and treated by analgesics and anti-inflammatory medications. Gait disturbance occur in 1 patient (5%) treated by physiotherapy, and improved. No complication occurs in 18 patients (90%). Failure of bone graft observed in 3 patients (15%) while the rest 17 patients 85% ended with functional and esthetic successful graft (Table 5).

Table 5. Classification of Failure cases

Failure cases (Total no= 3) (15%)	Number of patients	%
causes	1 sequestration 1 inflammation from osteomesh 1 soft tissue breakdown	5 5 5
Types of bone graft	1 cancellous bone 2 corticocancellous	5 10
Defect involvement	2 bone and soft tissue 1 bone loss alone	10 5
Etiological factors	1 ameloblastoma 2 shell injury	5 10
Anatomical distribution of the defect	1 alveolar bone 1 mandible 1 zygoma	5 5 5