

compression plates without IMF based on theoretical, biomechanical and experimental studies; he was able to develop **ideal lines of osteosynthesis**. Anterior to mental foramen: 2 miniplates are used, one subapical and another 5mm below to resist the strong torsional forces on this area. Posterior to mental foramen: 1 miniplate is placed subapically.

In the angle region, the vestibular osseous flat area located medial to external oblique line is chosen. He suggested that fixation along alveolar border is stronger than that along the lower border and that only the tractional strains at the alveolar border are needed to be neutralized^[6].

We have moved from an era when our primary concern is bony healing and stabilization while preserving maximal periosteal blood supply, to an era when precise reduction and stabilization can be achieved with absolute rigid internal fixation (RIF)^[7].

Patients and Methods

This study prospectively reviewed and discussed the result of 24 patients with mandibular # who were admitted to the Maxillofacial Department in Al-Kadhihymia Teaching Hospital during the period from November 2001 to November 2002.

The age of patients ranged from 16-45 years, 15 patients were males and 9 were females. Only patients with #s of symphyseal, parasymphyseal, body and angular parts of the mandible were selected (excluding ramus, coronoid and condylar #s) patients in whom mandibular #s were associated with mid-facial #s were also excluded. Diagnosis was based on history, clinical examination and radiographical examination.

Every patient was requested about past medical history to reveal any pre-existing systemic disease that may adversely affect healing or that could be a contraindication to surgery. Level of consciousness and pupil size and reaction were assessed and intracranial nerves

examinations were performed to exclude the presence of head injury.

The patients were examined for the presence of blood stained saliva, foeter oris, ecchymosis, sublingual haematoma, and for the presence of pain tenderness on palpation. The oral hygiene was evaluated and classified into good, fair and bad oral hygiene.

Dental status of the patients was evaluated for the presence of missing teeth, badly broken teeth, mobile teeth, painful or tender teeth; periodontally involved teeth and impacted teeth. Electric pulp testing was done to check the vitality of teeth. The occlusion was examined for the presence of step deformity, overriding, posterior gagging, posterior openbite and displacement of midline.

Radiographs were taken to confirm the diagnosis of #s, and to assess the direction of # line, displacement, comminution and the state of teeth in the # line. The radiographs that were commonly used are the orthopantomographs (OPG), oblique lateral mandible, and postero-anterior (PA) mandible. periapical, occlusal and CT-scans were sometimes used. The # site was approached either intra orally or extra orally (including approach through the scar). Combined approach was not used in this study.

Intra oral approach: Wide mucogingival incision through only mucosa, then blunt dissection was done before incising periostum to facilitate subsequent suturing. Periosteum was separated from bone using periosteal elevator exposing, and taking care not to damage the mental nerve.

Extra-oral approach: for symphyseal and parasymphyseal #s, submental incision 1 cm behind the mandible was used. For mandibular body #s, submandibular incision 2cm bellow the inferior border of mandible, the platysma muscle and the deep cervical fascia were incised and reflected to preserve the marginal mandibular branch of facial nerve, the facial artery and vein may have to be ligated. For angular #s, a retro-