Clinical Evaluations of Complications Following the Treatment of Nasal Fractures

A THESIS

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By

Nagham Hussain Ali
B.D.S. (Baghdad)

Supervised by

Prof. K. Y. Igzeer
B.D.S, M.SC (UNIV. of LONDON)
F.F.D.R.C.S.I.

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Abstract

This prospective study performed on 77 patients with different severity of nasal fractures, attended to Al-karkh General Hospital in Baghdad in the period from December 2003 to September 2004.

This study found that nasal fractures more commonly occur during the 2nd and 3rd decades of life with 4.9:1 male / female ratio and fights (31.17 %) were the most common etiological factor.

It was found that fracture mandible and lacerations of the skin over the bridge of the nose were the most common facial injuries that associated with 33 (43%) cases of fractured nose, and road traffic accident was the most common cause of these associated injuries.

This study depended on a detailed history and carefull extra and intra nasal examinations and to a minor degree on true lateral soft tissue profile X-ray view for the diagnosis of nasal fracture. The study adopted **Stranc and Robertson, 1979** classification system for frontal and lateral nasal injuries, and our cases were divided between (57 %) class I in which the impact is transmitted to the lower cartilaginous vault and tip of the nasal bone, and (43 %) class II in which injury is limited to the external nose and it involves the nasal septum and the anterior nasal spine. None of our cases were classified as class III (Naso Ethmoid injuries); also it was found that a frontally directed trauma was the most common in causing nasal injuries.

From total of 77patients with nasal fracture; a closed reduction technique was used in the managements of 46(59%) one, in which 37(48.05%) patients managed under general anesthesia with different instruments and fixation modalities. Manual reduction without anesthesia used in 9 (11.69%) patients from these 46 patients.

Clinical evaluations for the most important and common immediate post operative complications were done; and suggestion for a second evaluation

for the reduction results at time of extra nasal splint removal (7-10 days post operatively) were made and this considered a primary evaluation for the final results of reduction. The present study also found that pain and epistaxis, nasal bridge deviation and mild septal deviation were the most common immediate and intermediate post reduction complaint of the patients respectively. Results varied between good esthetic and functional results in more than half of the 46 reduced cases 28 (61%), accepted esthetic and good functional results (moderate) in 11(24%) cases, and failure results (poor esthetic and functional results) in only 7(15%) cases .

This study correlated the reductions' results to different factors that may contribute to unsatisfactory results, and this represents the most important part in our study in which a higher good results percentage found when the reduction performed at 6hr-7days after the trauma, with class I nasal fractures , with manual reduction without anesthesia while we had 52 % good results with using (Walsham's and asch's forceps) under general anesthesia, also higher good percentage associated with the group splinted by plaster of Paris (p.o.p.) only while we had (55.6% ,57%) good results for p.o.p. with intra nasal ribbon gauze, and p.o.p.with Iodfrom gauze splints that represent the most common fixation methods used .

The study reported that the main cause for the complications that might associate the managements of fractured nose was the routine using of closed reduction method in the treatments of nearly all types of fractured nose cases without attention to the severity and the time of the injury that might need other treatment modalities.