

How CoVID-19 changed our management of nasal bone fractures and its impact on patient outcomes – A retrospective study

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Abstract

OBJECTIVES: Nasal bone fractures are a common presentation to the Ear, Nose and Throat (ENT) surgeon. Simple, closed fractures are assessed in the Emergency ENT Clinic and considered for closed manipulation under anaesthesia (MUA #nasal bones). Most departments perform this under general anaesthesia (GA). Our protocol changed in the face of CoVID-19, where procedures were alternatively performed under local anaesthesia (LA) in the outpatient clinic, to cope with reduced elective theatre capacity during the pandemic. We present post-operative patient outcomes on breathing and shape, comparing GA versus LA.

METHODS: Patient records retrospectively analysed (January 2020-August 2020), and patients undergoing MUA #nasal bones were interviewed by telephone after one month.

Exclusion criteria were anyone who suffered an open injury or required elevation of depressed nasal bones. Breathing and shape scores were evaluated subjectively using a Likert scale (1=very unsatisfied, 5=very satisfied).

RESULTS: 205 nasal injury referrals were made (21 MUA #nasal bones under GA and 27 under LA). MUA #nasal bones significantly improved both breathing satisfaction scores (GA; 2.88+/- 0.24 to 4.06+/-0.23, $p<0.05$), (LA; 2.86+/-0.22 to 3.77+/-0.27, $p<0.05$) and aesthetic scores (GA; 2.00+/-0.21 to 3.94+/-0.23, $p<0.05$), (LA; 1.64+/-0.19 to 3.59+/-0.28, $p<0.05$) in both GA and LA groups. There was no statistically significant difference between LA and GA in post-operative outcomes. There was a trend towards greater satisfaction in the GA group, though this was not statistically significant and may be impacted by the rate of cartilaginous deformity in the LA group. Both techniques were well-tolerated and most patients would repeat the procedure in hindsight.

CONCLUSIONS: LA could provide a safer, cheaper, and satisfactory option for performing MUA #nasal bones in the outpatient clinic in selected patients, especially with reduction of elective theatre motor vehicle accidents.² Although complications such as epistaxis or septal haematoma may occur and need to be managed acutely, longer term sequelae include nasal deformity capacity in the event of further CoVID-19 surges. We recommend training junior ENT surgeons to perform this procedure under supervision.

Biography:

Johan Bastianpillai is a junior trainee Ear, Nose and Throat Surgeon at Northwick Park Hospital, part of the London Northwest University Healthcare NHS Trust, United Kingdom. He completed his medical training at King's College London School of Medicine and has a BSc in Clinical Pharmacology and Translational Medicine from King's College London. He is a Member of the Royal College of Surgeons of England and has a postgraduate degree in Medical Education from the University of Cardiff.

Speaker Publications:

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