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A Case Study of Meningoencephalitis following Le Fort I Osteotomy

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Abstract : Introduction: Le Fort I Osteotomies, although are common procedures in Oral and Maxillofacial Surgery, carry a degree of risk of unfavourable propagation of the down-fracture of the maxilla. This may be the first reported case in the literature for meningoencephalitis to occur following a Le Fort I Osteotomy. Case: A 32-year-old female was brought into the Emergency Department four days after a Le Fort I Osteotomy, with a Glasgow Coma Scale (GCS) of 8 (E3V1M4). A Computed Tomography (CT) Head showed a skull base fracture at the right sphenoid sinus. Lumbar puncture was completed, and Klebsiella oxytoca was found in the Cerebrospinal Fluid (CSF). She was treated with Meropenem, and rapidly improved thereafter. CSF rhinorrhoea was identified when she was extubated, which was successfully managed via a continuous lumbar drain. She was discharged on day 14 without any neurological deficits. Conclusion: The most likely aspect of the Le Fort I Osteotomy to obtain a skull base fracture is during the pterygomaxillary disjunction. Care should always be taken to avoid significant risks of skull base fractures, CSF rhinorrhoea, meningitis and encephalitis.

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