

# A Case Report of A Mid-Front Head Injury Using Starry Sky Surgical Approach of the Face

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## **ABSTRACT:**

A 20-year-old male was referred to the Department of oral and maxillofacial surgery, Trinity Hospital, Aizawl-Mizoram on July 4th, 2022 with a history of Road traffic accident (RTA). The patient was unconscious and was taken to the operation theatre and had multiple facial injuries. A frontal bone fracture with frontal sinus injury was noticed and a starry sky approach was used under GA. Overall, the starry sky approach shows very less scars and very less complications and proves to be the right approach in frontal bone fracture involving the midline.

**Keywords:** Centrilobular, Bilateral, Symphysis, Infraorbital rim, Endaural

## **INTRODUCTION:**

Facial injuries account for lots of facial fracture, most common etiology being road traffic accident .Facial fractures can be minor or complex and can happen in many ways. The incidence of head injury was 22.2 per 1000 person-years.

The starry sky approach also known as the centrilobular approach is not a new technique and has long been used by many surgeons and had long history and yet not many reports have been published and so this article is publish for future surgical reference and the technique is very easy and safe for even young surgeons.

## **CASE REPORT:**

A 20 year old unconscious male from a nearby village was referred to department of oral and maxillofacial surgery, Trinity-Hospital, melthum with a history of RTA and was admitted in the Intensive care unit(ICU).A complete Ct facial (axial,coronal,3D reconstruction) was taken and the patient shows multiple facial injuries over the symphysis, frontal bone, condyle, bilateral infraorbital rim and nasal bone. The patient was monitored and stabilised for a few days after the accident and was later taken for operation. A starry sky incision approach was used over the front head and was sutured with 4-0 prolene.

**SURGICAL STEPS:**

Patient was intubated with nasoendotracheal intubation under General anaesthesia and was draped and sterilised. Facial injuries was reduced and fixed using intraoral and extraoral approach (endastral, starry sky, infraorbital incision).

In starry sky incision, an incision was placed extending from the midline of eyebrow region and have an H-Shaped incision away from the facial artery. Once incision was done, skin elevation was done and the bone was exposed and fractured site was identified. The fracture was reduced and fixed with miniplates with a gap of 2x4 hole and 2x8mm screws. The muscle was sutured with 3-0 vicryl and the skin was finally closed with 4-0 prolene suture. The patient was extubated and the recovery was eventful.

**CONCLUSIONS:**

The starry sky approach is a very safe and easy technique in case of emergency operation in frontal bone fractures and this article confirms the technique that had long been used as a safe surgical technique with a very less scar and if use with the right surgical approach and caution.

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