

**PSC4: The Use Of Middle Turbinate Mucosal Graft In Endoscopic Guided Repair Of CSF Leak At The Cribriform Plate In A Patient With Severe Craniofacial**

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**OBJECTIVES:** To present the surgical technique of using middle turbinate mucosa graft in endoscopic guided intranasal repair of CSF leak at the cribriform plate in a patient with severe craniofacial trauma after a motorcycle vehicular accident.

**STUDY DESIGN:** Experimental

**SETTING:** Tertiary government hospital

**PARTICIPANT:** Patients seen at the ENTHNS outpatient department

**RESULTS:** An overlay technique is used to place the middle turbinate mucosal graft to repair the dural tear causing CSF leak. The technique offers several advantages: The middle turbinectomy as part of the technique improved surgical access for the localization and maneuvering during placement of the graft to the site of CSF leak; The middle turbinate as a source of the mucosal graft lies in the same surgical site without the need to do another surgical procedure to harvest graft from another site. The middle turbinate removed to provide access for the exploration of the CSF leak became useful again as a source of mucosal graft that could have been thrown away; and finally, the overall surgical time and morbidity of the patient decreases. After one week, the nasal pack was removed and nasal endoscopy revealed granulation tissue at the site of defect without CSF leak. Patient was discharged stable without signs and symptoms.

**CONCLUSIONS:**

Endoscopic guided intranasal repair using middle turbinate mucosa is an effective, minimally invasive technique for management of CSF leak. Middle turbinate mucosal graft provides a readily available material for repair of CSF leak.

**KEYWORDS:** middle turbinate, free graft, CSF leak, cribriform plate, endoscopic guided