

# *FUNCTIONAL ENDOSCOPIC SINUS SURGERY FOR CONTACT POINT RHINOGENIC HEADACHE*

## **THESIS**

Submitted for Partial Fulfillment of M.D. Degree in  
Otorhinolaryngology

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# (وقل رب زدني علماً)

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## Abstract

The headache was commonly dull aching in character and sometimes pulsating. It was referred most commonly to one side of the head with the orbit, the frontal and temporal areas were the predominant referral sites. It may occur without any nasal symptoms.

**Key word:** Endoscope Headache

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إهداء

إلى روح أبي وأمي

وإلى زوجتي

وإلى أولادي

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*INTRODUCTION &  
AIM OF THE WORK*

## *INTRODUCTION*

The patient with facial pain presents a diagnostic challenge. Difficulties arise because of the frequency of referred pain and the overlap in symptoms between different conditions. Painful stimuli affecting facial structures are mostly transmitted via afferents in the trigeminal nerve to the spinal tract in the brain stem (*Blau, 1982*).

The most sensitive area of the nose is the lateral wall of the nose, when stimulated by impacted nasal septum can cause referred trigeminal pain and chronic headache (*Iow and Willatt, 1995*).

The essence of the problem is how to diagnose the cause relatively quickly, effectively and methodologically. A careful history is central in establishing a correct diagnosis. It is possible that the pressure exerted by septal deviations on adjacent sensory nerves can produce pain, which has been called "the anterior ethmoidal nerve syndrome" (*Stammberger, 1991*).

In addition to their direct neurological effects, reflex changes perhaps may result from septal deformities which affect the nasopulmonary and nasal reflexes leading to autonomic vascular disturbance resulting, in. nasal congestion and consequently headache (*Stammberger, 1991*).

Stimulation of the lateral wall of the nose through contact between middle turbinate and nasal septum in cases of severely deviated nasal septum, enlarged pneumatized middle turbinate (concha bullosa), or medially displaced middle turbinate by enlarged ethmoidal bulla produce contact oedema between mucosal surfaces and release of pain mediators resulting in pain radiating along nerve fibers (*Stammberger, 1991*).

Various surgical modalities are done for management of headache e.g., submucous resection of nasal septum and partial middle turbinectomy. Patients are relieved of their headaches if the headaches are most intense over the frontal region, pressure like in nature. It is possible that headaches recur in the long term, and it is postulated that central mechanisms may play a role (*Iow and Willatt, 1995*).

Many people with facial pain suggestive of sinus disease are ultimately proved through extensive investigations to have intranasal pathology without sinusitis. The middle turbinate in close proximity to other mucosal surfaces has been implicated as a possible cause of the contact point rhinogenic pain. Surgical removal appears to provide relief in appropriately selected patients population. Preoperative assessment to date has been mostly exclusional. Inference has been made to the efficacy of topical vasoconstrictive and combined vasoconstrictor-anaesthetic agents as a diagnostic and prognostic aid for postoperative pain relief (*Landrigan and Kirkpatrick, 1992*).

## **Aim of the Work**

The aim of the work is to assess the role of the various anatomical variations of the nose in the pathogenesis of contact point rhinogenic headache of non- infective or organic cause. Also to put the criteria of diagnosing of such contact point rhinogenic headache, to search for its clinical presentation, CT findings and the best methods of managing these patients.

# REVIEW OF LITERATURE