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## **Comparative Study Of Histopathology Of The Inferior Turbinate In Chronic Rhinosinusitis And Chronic Rhinosinusitis With Polyp**

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## Comparative Study Of Histopathology Of The Inferior Turbinate In Chronic Rhinosinusitis And Chronic Rhinosinusitis With Polyp

**Purpose:** To study and compare the histopathological changes in the inferior turbinate (IT) mucosa, submucosa and bone in chronic rhinosinusitis(CRS), and chronic rhinosinusitis with polyp(CRSwP).  
**Methods:** The specimens of the IT in patients who underwent Endoscopic Sinus Surgery (ESS) and Inferior turbinoplasty (ITplasty) were included and studied under the microscope in high power field. The changes in the mucosa, submucosa and bone were studied, graded accordingly and compared between the two groups.

**Results:** In the mucosa, there was no significant difference in the polymorphonuclear neutrophils(PMN) and lymphocytic counts, however, the eosinophilic count in the mucosa was significantly higher in CRSwP ( $p=0.00$ ). There was no significant difference in the basement membrane thickness and subepithelial edema. In the submucosa, there was no significant difference in the PMNs and lymphocytes, however the eosinophilic count was significantly higher in CRSwP ( $P=0.00$ ). The bone did not show any inflammatory changes and the significant ostietic changes in the bone were periosteal thickening along with osteoblastic activity with a p value (0.016).

**Conclusion:** There is significant eosinophilia in the mucosa and submucosa of IT in CRSwP as compared to that in CRS. We can limit the resection of inferior turbinate bone if its not causing a significant obstruction.