

Assessment of Ostiomeatal Complex Abnormalities by Endoscopy and CT Scan and their Management

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Abstract

Background: The advent of modern techniques of analysis of paranasal sinus anatomy by CT imaging and nasal endoscopy has helped greatly in the successful performance of sinus surgeries. The current study aimed to determine the ostiomeatal complex abnormalities by endoscopic and CT scans and their management. **Methods:** This cross-sectional study was conducted in the Department of ENT, Prathima Institute of Medical Sciences, Naganoor, Karimnagar. Surgical Management: was done by Antral Lavage and FESS (Functional Endoscopic Sinus Surgery) using the Messerklinger approach was done. Post-operative care: At the end of the surgery small loose fragments of bone and mucosa are removed as it causes foci of infection. Packing of the nose using gauze, merocel, gel foam soaked with antibiotic ointment. Antibiotic coverage for 7 to 10 days. **Results:** The various skull base types found in our study. Keros Type I: n=6 (12%), Keros Type II: n=32 (64%), Keros Type III: n=12 (24%). The frontal sinus was present in n=45 sides, absent in n=5 sides, and Hyperpneumatized in n=14. The sinus was larger on the right in n=24 subjects and on the left in n=26 subjects. Inter-frontal cells were seen in n=8 (16%). Pneumatized turbinates, n=22(44%) showed lamellar pattern, n=2(4%) showed bulbous pattern and n=26 (52%) cases were true concha bullosae. The uncinata was typical in n=29 (58%), medialized in n=22 (44%), anteriorly turned in n=1 (2%), hypertrophied in n=6 (12%) and pneumatized in n=2 (4%). **Conclusion:** The depth of the olfactory fossa was of Keros Type II in the majority of patients. Because of the presence of these significant variations, we reemphasize the need for proper preoperative assessment in every patient to accomplish a safe and effective endoscopic sinus surgery.