

ADVANCED PROPTOSIS AND HYPERTELORISM A COMPLICATION OF FUNGAL SINUSITIS AND EXTENSIVE POLYPOSIS

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INTRODUCTION

Nasal polypi are non neoplastic masses of oedematous and pedunculated nasal and / or sinus mucosa. The manifestation of nasal polypi depends on the size of the polyp. Small polypi may not produce symptoms and may be identified only during routine ENT examination. Symptomatic polypi can cause nasal obstruction, postnasal discharge, dull headaches, snoring, and rhinorrhea. Massive polyposis or a single large polyp (eg, antrochoanal polyp that obstructs the nasal cavities and/or nasopharynx) can cause obstructive sleep symptoms and chronic mouth breathing. Rarely, the massive polyposis can alter the craniofacial structures and cause proptosis, hypertelorism, and diplopia which was seen in our case presented below.

CASE REPORT

A young girl of 19 years presented in ENT OPD for nasal obstruction and discharge for the last 05 years, proptosis for the last 03 years and soft swelling of forehead for the last 02 years. On examination of the nose it was full of intranasal polypi with complete nasal obstruction and purulent nasal discharge. Right maxillary sinus was tender. She had marked telecanthus and severe degree of proptosis that her right eye was almost out of orbit; however she did not have diplopia. There was a soft swelling over forehead in the area of frontal sinuses. It was about 4 x 4 cm in size rounded in shape with diffuse margins, non tender with intact and mobile overlying skin. Rest of ENT and systemic examination was normal. Her base line

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investigations like Blood complete picture, urine routine analysis and X-ray chest was



Fig. 1: Marked proptosis and pott's puffy swelling of frontal sinus.



Fig. 2: Extent of nose & para nasal sinuses involvement by polypi and fungus.

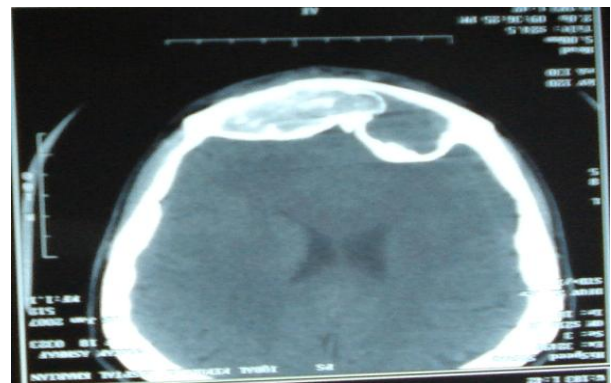


Fig. 3: Intracranial extension.



Fig. 4: Craniofacial approach.



Fig.5: Piece of Frontal bone containing frontal sinuses filled with pus and fungus.



Fig. 6: 5th Post operative day with stitches in place.

within normal limits. CT scan of head and neck including axial and coronal views of paranasal sinuses showed involvement of bilateral ethmoids, sphenoids, frontal and maxillary sinuses by inflammatory masses

which were also seen extending in to the cranial cavity breaking the posterior table of frontal sinuses and pushing the frontal lobe of brain posteriorly. Surgery was planned. Consultation of ophthalmologist and surgical specialist was sought. Patient and her relatives were taken into confidence and a detailed informed written consent was obtained. Craniofacial resection (CFR) was performed. Piece of frontal bone including the frontal sinuses was removed along with the swelling. All the polypi along with pus and greenish cheesy material was removed from both frontal and maxillary sinuses. Both ethmoids and sphenoids were cleared and decompression of both orbits was carried out medially and superiorly. Piece of frontal bone which was removed earlier was cleared of the soft tissue swelling and the greenish cheesy material and was replaced and wound closed in layers. The Polypi and cheesy material was sent for histopathology which turned out to be fungal infection on allergic polyps. Patient was discharged on 7th post operative day with advise of Tab Itraconazole (Omestin) 300 mg daily (Internet drug index Rx list) and a weekly follow up.

DISCUSSION

Multiple polypi can occur with chronic sinusitis, allergic rhinitis, Cystic Fibrosis (CF) or Allergic Fungal Sinusitis (AFS). The pathogenesis of nasal polyposis is unknown. An individual polyp could be an antrochoanal polyp, a benign massive polyp, or any of a number of benign or malignant tumors (eg, encephaloceles, hemangiomas, papillomas, juvenile nasopharyngeal angiofibromas, lymphoma, carcinoma, inverted papilloma). Although the male-to-female ratio is 2-4:1 in adults, the ratio in children is unreported [1,2]. No significant mortality is associated with nasal polyposis. Morbidity is usually associated with altered quality of life, nasal obstruction, anosmia, chronic sinusitis, headaches, snoring, and postnasal discharge. All children with benign multiple nasal polyposis must be evaluated for CF and asthma [3,4]. CT and MRI scans

can help diagnose the polypi, define the extent of the lesion in the nasal cavities, sinuses, and beyond; and narrow the differential diagnosis of an unusual polyp. Oral and topical nasal steroid administration is the primary medical therapy for nasal polyposis [5]. Antihistamines, decongestants, and sodium chromoglycate provide little benefit. Immunotherapy may be helpful to treat allergic rhinitis but, when used alone, does not usually resolve existing polypi. Most surgeons today treat polypi surgically but many are sensitive to corticosteroids hence a course of steroids pre operatively is worthwhile [6]. Medical treatment is of little benefit in the presence of fungal sinusitis. Surgical debridement followed by systemic antifungal therapy is the treatment of choice [4].

Surgically polypi can be removed either by simple intranasal polypectomy, endoscopic intranasal ethmoidectomy or external ethmoidectomy. For more extensive disease including chronic sinusitis and recurrence of polyps external frontoethmoidectomy or osteoplastic flap procedure can be done. Craniofacial resection is usually carried out for malignancies of ethmoids extending intracranially. In our case this technique was applied as no other procedure could expose the extent of disease completely [7].

CONCLUSION

This case suggests that the nasal polypi should be diagnosed early and treated

aggressively especially in adolescent and young adults as the larger ones increase the chances of craniofacial deformities and operative morbidity.

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