Giant Ossifying Fibroma of the Frontoethmoid Sinus: A Silent Peril

ABSTRACT

Objectives: To present a rare case of a large ossifying fibroma of the frontoethmoid sinus and describe our experience with the clinical presentation, diagnosis, management dilemmas, surgical approach and outcome of our patient.

Methods:

Design: Case Report
Setting: Tertiary Government General Hospital
Patient: One

Results: A 29-year-old housewife consulted with a large left frontoethmoidal mass of 20 years duration causing significant facial deformity, left eye proptosis, headache and psychosocial distress. Initial CT scans and MRI revealed a well-encapsulated mass occupying the frontoethmoid sinus, left orbit and anterior cranial fossa and subsequent surgical management involved three important aspects: 1) Wide extirpation of the tumor; 2) Preservation of the brain, left orbital contents and function; and 3) Reconstruction of the facial defect using calvarial bone graft, abdominal fat and temporalis muscle flaps.

Conclusion: A large ossifying fibroma of the frontoethmoidal sinus threatens the integrity of the vital structures it compresses and poses compelling diagnostic and surgical challenges. Adequate imaging, multidisciplinary planning and surgical expertise are needed to ensure a successful outcome.

Keywords: Ossifying Fibroma, frontoethmoid sinus, mucocele, orbital preservation, calvarial bone graft, abdominal fat graft

Ossifying fibroma is a rare, benign, slow-growing neoplasm commonly found in the maxillary-mandibular area. It is infrequently found in the paranasal sinuses much less in the frontoethmoidal area. Delayed surgical management may allow these lesions grow to massive proportions and cause a variety of complications demanding specialized multidisciplinary treatment. We present one such case.

CASE REPORT

A 29-year-old single mother of three from Camarines Norte, Philippines consulted for a large left orbital mass that began 20 years ago with progressive proptosis of her left eye associated with tearing and redness with no medical consult or medications. About 16 years ago, she started to have severe episodic left sided headache and consulted a private physician. A CT scan revealed a left frontoethmoid sinus tumor with intracranial and retro-orbital extension. She underwent partial transcranial excision of the left retro-orbital mass relieving left eye proptosis and headache. Histopathology revealed Cementifying Fibroma. She was then advised complete excision of the frontal sinus tumor but was unable to comply because of personal and financial reasons. She was discharged improved after three weeks.