ORIGINAL RESEARCH PAPER

ENT

KEY WORDS: Adverse Reactions, Antidote, Siddha system of Medicine

A RARE CASE REPORT ON BILATERAL FRONTAL MUCOCELE

Dr Naraboyena Bala Gurappa* final year post graduate, MS ENT, Kurnool medical college, Kurnool . *Corresponding Author

Dr R Bhanu Murthy M.S., D.L.O.2 professor of ENT, Kurnool medical college, Kurnool.

ABSTRACT

AIM OF THE STUDY: The aim of study is to present a case report on frontal mucocele, its clinical presentation, differential diagnosis investigations and management and follow up. Endoscopic assisted with external approach (osteoplastic flap procedure). Mucoceles of the frontal sinus are relatively uncommon lesions of benign entity that occur with approximately equal frequencies in adult males and females, with the highest incidence in the third and fourth decades. They are uncommon in pediatric subjects. The etiology may be multifactorial: trauma, allergy, inflammation, anatomic abnormality, previous surgery, osteoma, fibrous dysplasia, or ossifying fibroma. Surgery is the only effective treatment and may range from functional endoscopic sinus surgery to craniotomy and craniofacial exposure with or without obliteration of the sinus. M -Frontal mucocele, CT –computered tomography, MRI –magnetic resonance imaging, PNS –paranasal sinuses

INTRODUCTION:

Mucoceles are slow growing and locally aggressive lesions that occur as a result of accumulation and retention of mucous secretions in the sinus caused by the loss of draining properties of the mucous epithelium of the sinus. The fluid content progressively obliterates the sinus, and the pressure so generated leads to gradual erosion and distortion of the anterior and posterior bone walls. The lesion may extend to the orbital and intracranial structures and lead to meningitis, brain abscess, or cerebrospinal fluid (CSF) fistulas.

Because of the proximity of mucoceles to the brain, progress in volume may cause morbidity and potential mortality. The main symptoms of orbital involvement are pain, swelling, exophthalmos, diplopia, and loss of vision. Proptosis is usually the main complaint. Oculomotor nerve palsy with ptosis is rare, but it can be seen in patients with frontal mucocele.

Diagnosis is based on a clinical investigation conducted with the aid of computed tomography (CT) scans and magnetic resonance imaging (MRI). The CT scan is the main diagnostic assessment tool used for determining regional anatomy and extent of the lesion, in particular the intracranial expansion and the scope of bone erosion. MRI is helpful in making a definitive diagnosis because gadolinium enhancement on MRI differentiates mucoceles from neoplasms.

CASE REPORT:

A female patient by name Subba lakshmamma of age 49 years Presented with complaint of swelling over forehead and head ache since 6 month , Patient was apparently normal 6 months back ,She developed swelling over forehead, insidious onset, gradually progressive in nature and attained present size and head ache more since one month bilateral frontal region And disturbance in smell and change of voice.

Figure 1 : Shows Bilateral Frontal Mucocele

on INSPECTION Bilateral swelling of size 4x5 cm over forehead with ill-defined margins skin over swelling is normal, no visible pulsations, no scar, and no sinus and on PALPATION, Inspectory findings are confirmed, swelling is soft to firm in consistency, no local rise of temperature, tenderness present on deep palpation.

Present case investigated thoroughly with complete blood picture and radiological and histopathological confirm diagnosis. CT PNS shows Poloidal mucosal thickening of bilateral frontal sinuses with thinning of bony margins more on right side – erosion of outer table and inner table noted no evidence of intracranial extension and MRI PNS shows On T1 hypo intense, T2 hyper intense images shows enlarged frontal sinus with anterior bulge and No E/O intracranial extension, No E/O solid component Suggestive of frontal mucocele and FNAC and Ultra Sound scans are suggestive that frontal mucocele.

Ultra sound shows Swelling corresponds to 5x3 cm in frontal region with echogenic debris noted with adjacent thinning of bone in frontal sinus suggestive feature of FRONTAL MUCOCELE and FNAC of swelling over frontal region is done. MICROSCOPY: smear examined shows few scattered macrophages in a background of mucinous material

Figure 2 : CT Scan Of Para Nasal Sinuses

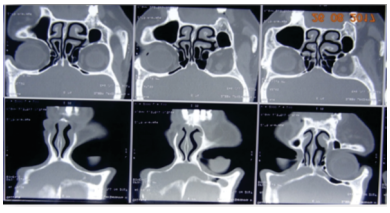
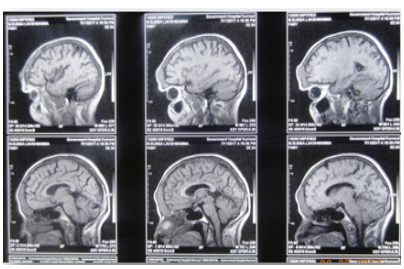


Figure 3 - MRI PNS And Brain



Operative procedure is following steps 1% xylocaine with

adrenaline 1: 100000 dilutions, infiltrations given over frontal region Incision giver over frontal region of size 7 cm, subcutaneous tissue (flap)separated from bone over frontal region. The anterior wall of frontal sinus is reflected as an osteoplastic flap. Mucous discharge is identified and drain. And endoscopically frontal sinusotomy done. main steps are Incision, Raise of Osteoplastic Flap, Interior of Frontal Sinus, Saline wash. Immediate post-operative period is uneventful. Hemostasis secured. No complication except scar. Post-operative period follows up done with CT PNS.

DISCUSSION:

Mucocele are uncommon in adults and can form in any of the paranasal sinuses. Bilateral frontal mucocele are rare, Followed by 8%–30% in the ethmoid sinuses, and less than 5% in the maxillary sinus. Sphenoid sinus mucocele are rare. Mucocele can form at any age, Majority are diagnosed in patients 40 to 60 years old. Males and females are equally affected. The incidence of skull base bony destruction and intracranial extension has been reported to be between 10% and 55%. In our case there is no bony destruction and intra cranial extension.

Mucocele are the most common benign lesions of the paranasal sinuses bilateral lesion of frontal mucocele are rare. Ninety percent occur in the frontoethmoid sinuses and frequently cause destruction of the surrounding bone and intracranial pathology. Diagnosis is difficult to differtiate from soft tissue benign lesions and Every case needs through clinical examination, Diagnostic Nasal Endoscopy, CT scan and MRI are mandatory. Laterally extended bilateral FRONTAL MUCOCELE require combined endoscopic sinus surgery with an external approach for complete clearance and safe and successful drainage.

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