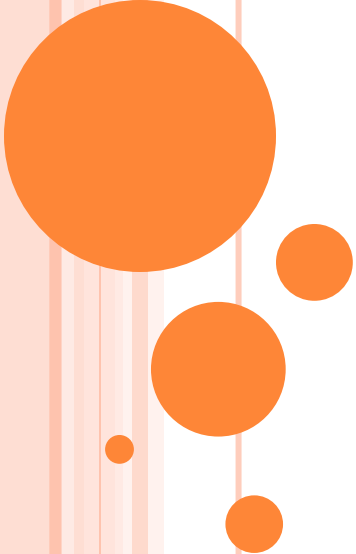




DIAGNOSIS AND MANAGEMENT OF SILENT SINUS SYNDROME

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- We have no financial intrests to disclose in this poster



INTRODUCTION:

- Silent sinus syndrome is a rare, unilateral, asymptomatic condition characterized by enophthalmus, hypoglobus and associated with maxillary sinusitis. (1) It is generally seen between 30-60 ages and independent from the gender. (2)
- Secondary hypoventilation due to osteomeatus obstruction in maxillary sinus is the reason of this syndrome (3) Chronic negative pressure in maxillary sinus slowly pulls down the orbita floor , changes the orbital anatomy and effects the intraocular tissues. (4) It can cause diplopia, asymetry in the face and enophthalmus, but it isn't generally considered in differential diagnoses. (1) Computer tomography is the gold standart test for diagnosis. (5)



METHOD:

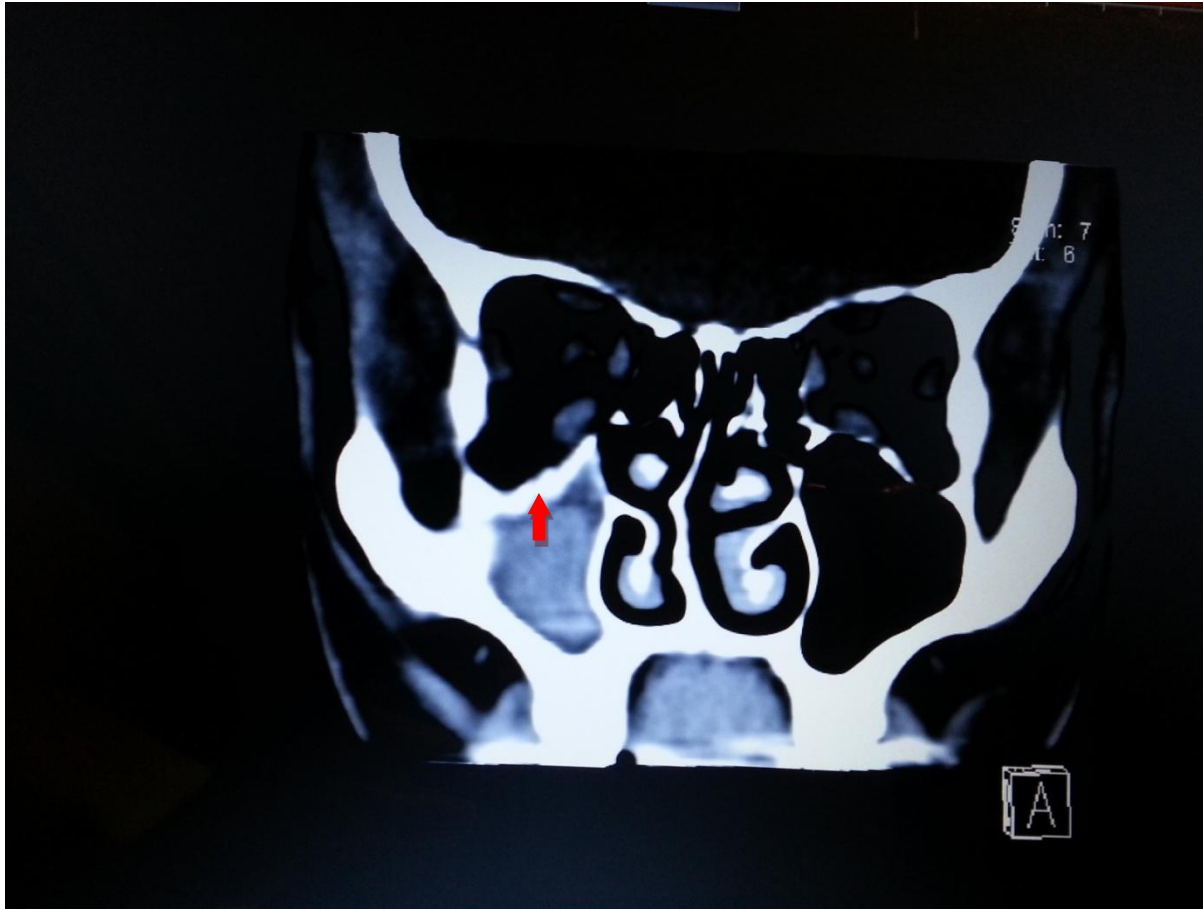
- A 35-year-old man applied to our clinic complaining that one of his eyes occasionally appeared smaller than the other for the last 6 months. The patient had no history of previous trauma or periorbital surgery. Ocular examination revealed 20/20 vision in both eyes and his pupillary and motility examinations were normal. The right eye showed 1mm hypoglobus and a deep superior sulcus. Margin reflex distance was 3mm in the right eye and 4mm in the left. Levator functions were 21mm in the left eye and 21 mm in the right eye. Hertel exophthalmometer revealed 14mm and 16mm for the right and left eyes, respectively. He had no diplopia. His thyroid functions and acetylcholine receptor antibody tests were normal. Considering possible silent sinus syndrome, CT scan was ordered and the diagnosis was established by visualizing occlusion in the right osteomeatal aperture of the maxillary sinus with typical bending of the floor towards the sinus.





Patient complaining about intermittent shrinking in one eye had 1mm hypoglobus and a deep superior sulcus.





Coronal section shows the occlusion in the right osteomeatal aperture of the maxillary sinus with typical bending of the floor towards the sinus.



RESULTS:

- The patient had undergone endoscopic sinus surgery through the right nasal meatus and the purulent material was drained through maxillary antrostomy. No intra- or post-operative complications were observed and patient complaints and symptoms resolved immediately after surgery. No recurrence occurred in the next 6 months of follow up period.



CONCLUSION:

- Silent sinus syndrome is a rare condition presenting with enophthalmos and hypoglobus on the affected side. Maxillary sinus surgery is curative of this usually unrecognized condition.



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