Summary

Our study was conducted on 54 patients with chronic rhinological symptoms. After complete history taking, general and local examinations were done. All patients were subjected to coronal CT scans on the paranasal sinuses and were classified according to the finding into two groups, group A with isolated CMS and group B without maxillary sinusitis.

All patients were subjected to endoscopic sinonasal examination to detect the presence of accessory maxillary ostia in the fontanelle regions.

We found the AO as an anatomic entity in **(24%**) of our CMS patients, usually in the PF region **(71.42%),** bilaterally in **(14.29%)**, while AO was found only in **(3.45%)** of those patients without maxillary sinusitis. In our opinion, this defect is very rare in those without maxillary sinusitis, and more frequent in those suffering from CMS, which theoretically implicates disturbances in the mucociliary clearance of the related maxillary sinus, reflecting the importance of drainage rather than ventilation of the sinus.

Conclusion

In conclusion, our study revealed that there is a close association between isolated maxillary sinusitis and the presence of accessory maxillary ostia. The ostia are usually unilateral and frequently found in the posterior fontanelle region.

The defects in the region of the posterior or anterior fontanelles of the lateral nasal wall have called “accessory ostia” for years. It is about time to change the understanding and estimation of this clinical finding, because these defects have been clinically related to the chronic infection of the maxillary sinus and, therefore, should be considered as an analog of the perforations at the eardrum in cases of chronic otitis media.

The accessory ostium could be clinically important because its presence cause disturbances in the mucociliary clearance of the related maxillary sinus and it could serve as a maintainer of the chronic inflammation.

The fontanelle defect implicates disturbances in the drainage of the related maxillary sinus and despite of being the sinus better ventilated, chronic inflammation results.