Foreign bodies (FB) are a common occurrence in the realm of ENT practice. The most commonly involved sites are nasal cavities, ears, and pharynx. Foreign bodies are accompanied by site-related symptoms and do not pose much of a challenge to well-trained physicians. Foreign bodies are usually introduced by the patient or by accident. Foreign bodies are accompanied by site-related symptoms. The most commonly involved sites are the sinonasal cavities (60%), the maxillary sinus (75%), and the ethmoid sinuses (25%). The latter may occur as a consequence of dental, ophthalmic, and otolaryngological procedures. The maxillary sinus is more frequently involved (75%), followed by the frontal sinus (18%).

Only a few cases of self-inoculated paranasal sinus foreign body have been reported in the literature. This paper reports a case of chronic sinusitis secondary to the inoculation of multiple foreign bodies in the maxillary sinus.

CASE REPORT

M.C., 49, sought ENT care complaining of nasal obstruction, halitosis, cacosmia, purulent rhinorrhea, and postnasal drip for three years. Nasal fibroscopy showed a hypertrophied middle nasal concha to the right and a deviated septum (+++/+++ in Cottle’s area III convex to the concha to the right and a deviated septum (+++/4+) in Cottle’s area III convex to the concha to the right). The patient was diagnosed with chronic rhinosinusitis and was prescribed levofloxacin, 500mg/day orally for 41 days, prednisone, 40mg/day for 6 days and progressively lower dosages for up to 10 days, and nasal flushing with saline solution.

The Caldwell-Luc procedure is the approach of choice to address this condition, mainly when it cannot be treated endoscopically. The Caldwell-Luc procedure combined with the endoscopic approach has been described as the golden standard for the treatment of various diseases of the maxillary sinus including foreign bodies, particularly when complete resolution cannot be achieved by functional endoscopic surgery.

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The patient improved only marginally. A CT scan of the paranasal sinuses was done after the patient followed the treatment described above. The maxillary sinuses were filled and in the right middle concha was bullous. Functional endoscopic surgery was offered to the patient.

DISCUSSION

Foreign bodies in the paranasal sinuses are rare, but are an integral part of the differential diagnosis for rhinosinusitis, mainly when it occurs unilaterally. When symptoms appear at later stages, the most frequent complaints are indicative of chronic rhinosinusitis. The patient at hand had both maxillary sinuses involved. The foreign bodies precipitated the onset of left sinus disease. CT scans revealed bone failure on the floor of the left maxillary sinus, probably connected to the previously existing oroantral fistula. No foreign bodies were found on the right side, and the patient’s anatomic alteration (bullous middle concha) was probably the reason why this sinus was involved.

CONCLUSION

Foreign bodies in the paranasal sinuses are rare. Oroantral fistulas are the most common inoculation path, mainly those secondary to dental procedures. The Caldwell-Luc procedure is the approach of choice to address this condition, mainly when it cannot be treated endoscopically.

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