CASE PRESENTATION

Scopulariopsis of the Maxillary Antrum: A Case Report

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ABSTRACT

A rare case of fungal infection "Scopulariopsis" of the maxillary antrum was diagnosed by culture and treated successfully with surgery. Infection of the paranasal sinuses by any fungus is uncommon. The common fungi causing maxillary sinusitis are Aspergillosis and Phycomycetes. They present either as a non-destructive disease indistinguishable clinically and radiologically from non-specific chronic sinusitis, or as a destructive disease which is clinically and radiologically indistinguishable from neoplastic disease. Treatment is by surgery for the first type, and by surgery & antifungal agents for the second type [1].

The details of this case and review of the literature is presented in this report.

CASE PRESENTATION

Mrs. L.P., a 44-year-old Asian lady, was referred in June 1984 with the main complaint of left sided facial pain and associated toothache of one year duration. She also complained left-sided nasal obstruction, but without rhinorrhoea, sneezing or epistaxis.

Clinical examination revealed a mildly deviated nasal septum to the left without any other abnormality. She was tender over the left cheek. Her post-nasal space, throat, and neck examination were normal. Sinus X-rays showed an opaque maxillary antrum of the left side. The patient underwent a left antral washout under general anaesthesia, producing foul-smelling pus. An antrostomy was fashioned and a 14 French Gauge Malecot catheter inserted for post-operative irrigation of the sinus. After three days, the irrigation produced clear fluid and the catheter was removed. The culture of the washout showed "No growth". The patient reviewed after four weeks, and still complained of left paranasal pain. Clinical examination and repeated X-ray of her sinuses showed the same findings as on presentation

The patient therefore underwent a left-sided Caldwell-Luc operation which revealed a yellow and black apparently necrotic material filling the maxillary sinus with thickening of the mucosal lining. The bony walls were intact. All the necrotic material was removed and the mucosal lining stripped. Specimen were sent for bacteriology, mycology and histology. Histology showed no evidence of malignancy. Haemophilus influenzae and a rare fungus, "Scopulariopsis Brevicaulis" were isolated. No systemic or local antifungal treatment was used. Six weeks post-operatively the patient was asymptomatic and has remained so to the time of writing, four years after surgery.

DISCUSSION

Mycotic infection of the maxillary sinuses is rare, though there has been an increase in the number of

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cases reported due to growing interest and awareness of Otolaryngologists, and improvement in the facilities for investigation, diagnosis and treatment, besides the wide use of Antibiotics, Steroids and Anticancer agents [2]. The common fungi causing maxillary sinusitis are Aspergillosis and Phycomycetes. The rare fungus "Scopulariopsis" found in our case has not been reported previously as a cause. The condition occurs commonly in debilitated patients, those on immunosuppressive drugs or long courses of antibiotics or steroids, and also in poorly controlled diabetic patients. Sometimes, it is precipitated by trauma to the face, and it has been reported as a complication of root filling of the upper teeth. Neverthless, it also occurs in patients in good general health [3]. Mycotic maxillary sinusitis may localise in the sinus cavity, but occasionally in seriously debilitated patients it may spread to the orbit or intracranial structures causing serious complications.

Clinically, a patient may present with paranasal pain and nasal discharge, or with nasal and post-nasal discharge which may be blood stained. Clinical diagnosis of a localized infection may be difficult, while in progressive mycosis six pathogenic signs are seen: dark nasal exudate, dark necrotic turbinates and septum, pain, peri-orbital oedema and ocular signs (ptosis, dilatation and/or fixation of the pupil, and decreased ocular mobility). Radiologically the antra are opaque but without fluid levels. In advanced cases, nodular thickening of the antral mucosa and destruction of the bony wall is seen.

Treatment of the condition when it is localized to the sinus in a healthy subject is surgical clearance via a Caldwell-Luc operation followed by observation. Where the infection has invaded the surrounding structures, addition of systemic Amphotericin B is recommended, bearing in mind its potential to cause kidney and liver damage.

CONCLUSION

Fungal infection of paranasal sinuses should always be in mind when dealing with a case of chronic sinusitis not responding to the conservative measures, and when further surgery done, it is to be remembered that any suspicious specimen removed from the sinuses should be sent to mycology, histology beside bacteriology because bacteriology alone is always negative in this condition. Histology is to rule out malignancy. Otherwise it is extremely difficult to diagnose such a rare condition.

REFERENCES

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