INTRODUCTION:

Leishmaniasis is a protozoal infection transmitted by a sandfly vector. According to the World Health Organization (WHO), mucocutaneous leishmaniasis (MCL) is endemic in Central and South America. Almost 90% of mucocutaneous leishmaniasis cases occur in Bolivia, Brazil, and Peru (1). In Germany leishmaniasis of the mucous membranes is a rare condition and usually due to extension of local skin disease into the mucosal tissue via direct extension, bloodstream or lymphatics (2). Because of the chronic local destruction of facial structures, MCL may deface the patient if not recognized and adequately treated.

CASE:

A 66-year-old German woman presented in a university hospital with nasal obstruction. Clinically showed the patient nodular and ulcerative lesion at the nasal septum. Histology of the left nasal septum biopsy revealed necrosis and chronic inflammation which was suggestive of leishmaniasis (Figure 1). The molecular-pathological detection of parasite DNA was positive for Leishmania infantum. The medical history includes hypothyroidism and rheumatoid arthritis for which she was under continuous immunosuppressive treatment with methotrexate and Anti-TNF-blocker (Humira) several years ago. Moreover, she was treated for cutaneous leishmaniasis in the left elbow after a travel history in Mallorca five years ago (4 weeks, Amphotericin B). The patient successfully retreated as a case of Mucocutaneous leishmaniasis receiving at first liposomal Amphotericin B for 2 weeks. Under the treatment showed the patient an increased level of creatinine, therefore, the therapy was changed to a phospholipid (Hexadecylphosphocholin = Miltefosin®) for 4 weeks with a side effect of vomiting. Follow up visits showed significant improvement with no recurrence.

Figure 1: Photomicrograph shows intracellular Amastigote (hematoxylin – eosin stain)

DISCUSSION:

Mucocutaneous leishmaniasis is rarely diagnosed in Germany. The majority of the cases are seen in patients living in or visiting endemic regions (3). The reviewed medical literature through the electronic database Pubmed showed that leishmaniasis was not notifiable in Germany until 2000. Within 2 years 70 cases of leishmaniasis (43 cutaneous or mucocutaneous/mucosal, 27 visceral) were reported. The data were available for 58 patients (35 cutaneous or mucocutaneous/ mucosal; 23 visceral). Of 35 patients with MCL or CL, 30 had a travel history to endemic areas and seventeen lesions were located in the face, including mouth and nose (4). Mucocutaneous leishmaniasis developed as a consequence of Cutaneous leishmaniasis.

Histologically, MCL may mimic other granulomatous or neoplastic diseases and differentiation is only possible by the morphological features of the parasite (6). In majority of studies, the gold standard method of diagnosis was a biopsy with the molecular detection of parasite DNA by PCR (7). The primary goals of therapy for leishmaniasis is to prevent the mortality and morbidity. The first line of treatment for MCL is the pentavalent antimony compounds, liposomal amphotericin B or standard amphotericin B while miltefosine is used as a second line of treatment (8) (9).

CONCLUSION:

The aim of this study to raise the awareness among the otolaryngologist in European countries of mucocutaneous leishmaniasis as a differential diagnosis of mucocutaneous lesions especially in patients with travel history to endemic areas.

REFERENCES:

Literature review by the Author