Otitis Externa: first presentation of AIDS in a child (Case Report)

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Introduction
Almost 30 years after its first description, 1HIV (Human immunodeficiency virus) still remains a global pandemic, particularly affecting the countries of sub-Saharan Africa, Southeast Asia, and Latin America. HIV is an RNA retrovirus which compromises the immune system, and renders the infected person susceptible to opportunistic infections and malignancy. The increased incidence of HIV has resulted in a greater number of HIV-infected patients presenting to E.N.T. (Ear. Nose. Throat) doctors. Indeed, up to 80% of HIV-infected patients eventually develop E.N.T manifestations.2-4 Among the latter, oral disease seems to be the most common, occurring in approximately 40-50% of HIV positive patients.5 Although E.N.T manifestations may not be diagnostic of HIV infection, they may be heavily suggestive of such an infection.6 In addition, the occurrence of certain oral manifestations in patients with known HIV disease who are not receiving treatment may be related to the progression of the disease.8 Finally, the presence of E.N.T disease in patients on antiretroviral therapy could be the result of an increase in the plasma HIV-RNA and suggest treatment failure.

Otological manifestations of HIV infection
The spectrum of otological manifestations in HIV infection is wide. It involves all three parts of the ear (external, middle, inner), with a cumulative frequency of 20-80% in both adults and pediatric patients.3,4 Indeed, seborrheic dermatitis has been reported in up to 83% of patients, and usually involves the Periauricular area. 11,12 Otis media with effusion secondary to nasopharyngeal lymphoid hyperplasia or other nasopharyngeal masses is also not uncommon in HIV-positive patients.13, 14ever, Kaposi’s sarcoma should be excluded. 15Acute otitis media may also occur, but is usually seen in patients with end-stage HIV disease. Finally, an increased prevalence of Pneumocystis carinii-infected aural polyps has been reported in HIV patients with chronic otitis media.4 Treatment in cases of middle ear infection usually includes broad-spectrum antibiotics, whereas mastoid exploration may be necessary in cases unresponsive to conservative treatment.15 HIV was shown to induce neuro pathological changes and damage to the central nervous system, particularly subcortical demyelination, in a large percentage of infected individuals, even in the absence of gross neurological manifestations. 60.16 Other causes of sensorineural hearing loss such as neoplasms, and ototoxic agents should also be excluded.

If the hearing loss affects the patient’s everyday listening activities and quality of life, the provision of digital hearing aids should be considered. HIV patients also tend to experience significant dizziness, which is also often clinically attributed to central nervous system pathology. However, inner ear abnormalities have also been reported (i.e. sub-epithelial elevation of the neurosensory epithelium of the saccule and utricle, inflammatory endolymphatic precipitations and may also be important in the pathogenesis of vertigo in these patients.13 Finally, unilateral and bilateral facial nerve palsy is a condition that occurs with a 100-fold greater frequency in the HIV infected population (4.1% vs 0.04%). 16, 17 Facial nerve neuropathy can occur at any stage of the HIV infection. It may precede the appearance of HIV antibodies, and seems to occur more frequently in HIV carriers than patients with full blown AIDS. 18-20 Peripheral facial nerve neuropathy usually self-limiting, and may either be idiopathic, or due to herpes virus infection (Ramsey Hunt syndrome). 21 Treatment includes acyclovir 800mg five times daily for seven days, and administration of prednisolone 30 mg once daily for five days, with tapering of the starting dose in three-day intervals. Facial nerve palsy can also be seen in end stage patients either as an isolated entity, or as part of multiple cranial nerve involvement. 22 However, it is usually secondary to opportunistic infections or intracranial tumor.

References
3. Williams MA. Head and neck findings in pediatric acquired immune deficiency syndrome. Laryngoscope. 1987;97:713-6

Fig.1: perichonditis
Fig.3: otosquamousitis
Fig.2: no sig of healing

CBC: leucopenia
ELISA: HIV positive
Culture: pseudomonas

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