

HIV Parotitis

Gouranga Santra*



Fig. 1 : Right parotid gland swelling.



Fig. 2 : Bilateral parotid swellings.



Fig. 3 : Left parotid gland swelling.

A 27 years old married female presented with gradual onset painless swellings of both parotid glands for last six months. The swellings did not fluctuate in size during meals. She was afebrile. She had no history suggestive of dry eyes but had dry mouth. She had recurrent respiratory tract infections and oral thrush for last two years. She had no history of binge eating, jaundice and no significant drug history. Her husband had heterosexual exposure to commercial sex workers. She had moderate pallor. Lymphadenopathies were absent. Parotid swellings were diffuse, non-tender, firm in consistency with no fluctuation. Oral mucosa was dry. Other system examinations revealed no abnormality. Her Hb was 8 gm% and RBCs were normocytic hypochromic. Blood sugar, urea and creatinine levels were normal. HBsAg and anti-HCV were negative. She was positive for HIV-1. CD4 count was 185/microliter and CD8 count was 910/microliter. USG showed bilateral diffuse parotid enlargement. FNAC revealed lymphocytic infiltration. HLA-DR5 was positive. Chest X-ray and USG of abdomen were normal. No opportunistic tuberculosis infection was found. Her husband was found to be HIV positive. The patient was diagnosed to have HIV parotitis.

Chronic bilateral nontender parotid enlargements occur with Sjogren's syndrome, sarcoidosis, uremia, diabetes mellitus, cirrhosis, alcoholism, amyloidosis, acromegaly, bulimia, and drugs, e.g. phenylbutazone, iodide, propylthiouracil etc. Mikulicz's syndrome is a chronic, usually painless parotid and lacrimal gland swelling of unknown etiology that occurs with tuberculosis, sarcoidosis, SLE, leukemia and lymphoma.

Parotid gland enlargement occasionally complicates HIV infection but it is less common in adults than in children. Microscopic examinations of HIV parotitis reveal three types of involvement: (1) follicular hyperplasia of the parotid lymph nodes, (2) diffuse infiltration of the gland by lymphocytes (mostly CD8 T cells) and (3) benign lymphoepithelial cysts. Possibly these are the spectrum of a single disease, i.e. diffuse infiltrative lymphocytic syndrome (DILS). Lymphoepithelial cysts are more common in adults than in children. Xerostomia occurs more frequently in adults. DILS is associated with parotid gland enlargement, dry eyes, dry mouth, lymphadenopathy, lymphocytic interstitial pneumonitis and increase in circulating CD8 T cells. In contrast to Sjogren's syndrome, in which infiltrates are composed of CD4 T cells, in DILS infiltrates are composed predominantly of CD8 T cells. DILS is predominant in young males, associated with HLA-DR5 and don't have anti-Ro and anti-La antibodies.

Ultrasound, CT scan, MRI, FNAC or biopsy can aid in diagnosis of HIV parotitis. If the enlarged parotid gland causes cosmetic deformity, antiretroviral therapy or low-dose radiation therapy may decrease the size of the gland.^{1,2} Patients need careful follow-up as DILS may progress to lymphoma.

References

1. Mandel L, Surattanont F. Regression of HIV parotid swellings after antiviral therapy: case reports with computed tomographic scan evidence. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2002; 94:454-9.
2. Beitler JJ, Vikram B, Silver CE. Low-dose radiotherapy for multicystic benign lymphoepithelial lesions of the parotid gland in HIV-positive patients: long term results. *Head Neck* 1995; 17:31-35.

*RMO-cum Clinical Tutor, Department of Medicine, Medical College, 88, College Street. Kolkata-700073
Received: 9.9.2008; Revised: 17.11.2008; Accepted: 20.3.2009