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Large liquefaction of lymph nodes during tuberculosis-associated immune reconstitution inflammatory syndrome in an HIV-infected woman

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DESCRIPTION

A 27-year-old HIV-positive untreated woman was admitted for general deterioration, fever, productive cough and peripheral lymph nodes. HIV viral load was 3.1×10^6 copies/ml and CD4 cell count was 30 cells/mm³. CT scan showed a nodule in the right upper pulmonary lobe, multiple cervical, intrathoracic, abdominal and inguinal lymph nodes. Disseminated tuberculosis (TB) was diagnosed as sputum cultures were positive for fully susceptible *Mycobacterium tuberculosis*. Rifampin, isoniazid, ethambutol and pyrazinamid were begun. Six weeks later, a well evolution permitted the introduction of anti-retroviral therapy (ART). After 2 weeks, the patient presented with recurrent fever and convulsion. Imaging showed increase of the cerebral lesion with oedema. HIV viral load decreased by half and CD4 cell count rose at 93 cells/7 litre. TB-associated immune reconstitution inflammatory syndrome (IRIS) was mentioned and steroids (methylprednisolone, 0.5 mg/kg) was begun with good results. Three months later, the patient presented with large enlargement and liquefaction of cervical lymph nodes leading to dysphagia (figure 1). After 18 months of antituberculous therapy associated with ART, the outcome was favourable, without surgical resection of the lymph nodes.

IRIS could occur in various situations after the start of highly active antiretroviral therapy (HAART). Paradoxical

TB-associated IRIS occurs in 8–43% of patients after the sequential introduction of anti-TB drugs and ART, and correspond to worsening symptoms of TB.^{1 2} TB-IRIS is more frequently seen in patients with low CD4 count, high HIV viral load, disseminated TB at diagnosis and rapid reduction in viral load on ART.^{2 3} Management includes the continuation of TB-treatment and ART, associated with steroids.^{2 4} Enlarging cervical lymph nodes are a common feature of paradoxical TB-IRIS but their liquefaction is rarely described; and might occur during steroid therapy, as described here. Surgery might not be performed, except for exceptional refractory cases with organ compression, only.^{2 4}

Learning points

- ▶ Tuberculosis (TB)-associated immune reconstitution inflammatory syndrome (IRIS) could be associated with large liquefaction of lymph nodes.
- ▶ Management of TB-associated IRIS includes continuation of anti-TB drugs and HAART.
- ▶ Steroids might improve the morbidity of TB-associated IRIS, but surgery might not be performed, except for exceptional refractory cases with organ compression, only.

Figure 1 Axial CT scan (panel A) with coronal reconstructions (panels B and C) showing large liquefaction of cervical lymph nodes close to cervical vessels (arrow, panel B) with mass effect and cavum deformation (arrow, panel A).

Competing interests None.

Patient consent Obtained.

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Offner M, Perpoint T, Chidiac C, Ferry T. Large liquefaction of lymph nodes during tuberculosis-associated immune reconstitution inflammatory syndrome in an HIV-infected woman. *BMJ Case Reports* 2012;10.1136/bcr-2012-006652, Published XXX

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