Persistent sore throat and sleep apnoea: an unusual presentation of sarcoidosis

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DESCRIPTION

A 30-year-old woman presented with recurrent upper respiratory tract infection, snoring and sleep difficulties diagnosed as sleep apnoea of 18 months' duration. Further history revealed that she had presented with painful nodular rashes on her legs a year prior, which was diagnosed as erythema nodosum. The rashes resolved after treatment with anti-inflammatory medication. She is otherwise fit and healthy.

Extraoral examination was unremarkable, except for bilateral diffuse neck node enlargement at level 1 and level 2, which were non-tender and diffuse, measuring 1–1.5 cm. Intraorally, there was asymmetrical tonsil enlargement, with the left being larger. The rest of the ear, nose and throat (ENT) and general examination were normal.

Ultrasound of the neck was performed which demonstrated prominent cervical and intraparotid nodes. No sinister pathology was identified; however, in view of the worsening symptoms, the patient was consented and planned for bilateral tonsillectomy. Histology of the tonsils showed diffuse non-necrotising granulomas (figures 1 and 2). No mycobacterial or fungal organisms were found following additional stains. There was no evidence of malignancy. On diagnosis of non-necrotising granulomatous disease, further history to exclude mycobacterial infection, such as weight loss and night sweats, was explored, of which the patient denied any. Chest radiograph was done which showed bilateral hilar lymphadenopathy (figure 3). ACE level was elevated at 104U/L (20–70), and full blood count, liver function test, bone profile and renal function test were within normal limits. Fine needle aspiration of the cervical nodes was done to obtain materials for mycobacterial culture, which was negative.

In view of the history of erythema nodosum, bilateral hilar lymphadenopathy, elevated ACE and the

Figure 2 H&E $\times 100$ illustrating diffuse non-necrotising granulomas within the tonsil.

non-necrotising nature of the tonsillar granulomas in the absence of other aetiologies, a diagnosis of sarcoidosis was made. The patient was informed of the diagnosis and has reported improved breathing after tonsillectomy. She is currently clinically stable and under follow-up by respiratory physicians.

Sarcoidosis is a systemic inflammatory disease of unknown aetiology that affects multiple organs. It is associated with non-necrotising granulomas in involved sites. In over 90% of patients, the lungs and the hilar and mediastinal lymph nodes are involved. In the literature, isolated presentation of sarcoidosis as tonsillar enlargement is rarely reported.^{1 2}

Granulomatous inflammation of the tonsils is rare, and when present is usually part of presentation of systemic diseases such as sarcoidosis, Crohn's disease, fungal infection and tuberculosis.^{3 4}

The diagnosis of sarcoidosis is made with the exclusion of histopathological features associated

Figure 1 H&E $\times 40$ illustrating diffuse non-necrotising granulomas within the tonsil.

Figure 3 Chest radiograph demonstrating bilateral hilar lymphadenopathy. PA, posteroanterior.

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with other causes of granulomatous inflammation, provided compatible clinical and radiological findings are established. These include the use of Ziehl-Neelsen and silver stains to assess for mycobacterial and fungal infections, respectively.

This case highlights that sarcoidosis should be considered as a differential diagnosis in the evaluation of asymmetrical tonsil enlargement. Once sarcoidal type non-necrotising granulomatous lesions are found in tonsillar specimens, further

investigations are mandatory to confirm the diagnosis and to exclude other possible aetiologies.

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Learning points

- ▶ Persistent sore throat and recurrent upper respiratory infection should prompt referral for thorough evaluation.
- ▶ Non-pulmonary sarcoidosis can show variable presentation and therefore sarcoidosis should be considered and excluded in the differential diagnosis of granulomatous inflammation in the tonsil.
- ▶ Sarcoidosis is a systemic disease and early diagnosis is vital for institution of management and limitation of morbidity.

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