Inguinal sarcoidosis–an Unusual Presentation

INTRODUCTION
Sarcoidosis is a chronic multisystemic disorder of unknown etiology. It is characterised by non-caseating granulomas with pulmonary involvement, bilateral, in 90% cases. Hilar or paratracheal pulmonary lymphnodes are often enlarged. The disease also affects certain extra-pulmonary sites like liver, spleen (20%), joints, skin, eye and bone marrow. This is a case report of a rare case of extra-pulmonary sarcoidosis, involving the inguinal lymph nodes, a rare site of occurrence as such. A 35-year-old female presented with a large solid diffuse lump in left thigh for 3 months. Clinically, it appeared to be a soft tissue tumour. On FNAC, smears were paucicellular and only few spindle cells against a haemorrhagic background were seen. MRI showed multiple enlarged inguinal lymph nodes on the left side of the thigh. On CT, bilateral hilar lymphadenopathy was seen. Post excision lump on histopathological examination revealed, characteristic Schaumann bodies and asteroid bodies with multiple confluent non-caseating granulomas, and a diagnosis of sarcoidosis was made. The case was finally diagnosed as extrapulmonary sarcoidosis of the inguinal region, which as such is a rare site for nodal involvement.

CASE HISTORY
A 35-year-old female presented with a solid fluctuant lump measuring 4 × 3 cm on the medial side of left thigh for 3 months. She was asymptomatic 3 months back when she presented to the hospital with a slow growing painless fluctuant swelling. She had no pedal edema or any history of fever. All her other systems were within normal limit. The patient underwent surgical excision of the lump and it was sent for histopathology to the department.

MATERIALS AND METHODS
Routine haematological investigations were within normal limits. MRI revealed multiple enlarged inguinal lymph nodes on the left side. CT scan revealed bilateral hilar lymphadenopathy.

Cytology
Paucicellular smears on repeated aspiration showed occasional clusters and singly scattered spindle to oval cells having smooth, regular nuclei, no mitosis or hyperchromasia seen on a fat mixed haemorrhagic background.

Histopathology
Three irregular globular soft tissue pieces with attached fibro-fatty tissue were received. The largest measured was 7.5 × 5.5 × 3.5 cm, the second one was 6.8 × 4.5 × 2.0 cm and the smallest was 2.3 × 1.8 × 1.5 cm. Outer surface was irregular, non-capsulated, grey white to yellow. On cut surface homogenous, grey white firm nodular areas without necrosis was seen.

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On microscopy, haematoxylin and Eosin-stained sections showed lymph node-like architecture with multiple confluent granulomas and preservation of normal follicles at periphery Fig. 1(a) and (b) Numerous epitheloid cells, lymphocytes and histiocytes forming multiple non-caseating granulomas with giant cells, both Langhan’s type and Foreign body type were seen Fig. 2(a) and (b). Schaumann bodies and Asteroid bodies were also seen Fig. 3(a) and (b).

**DIFFERENTIAL DIAGNOSIS**

- Tuberculosis
- Fungal infection
- Lymphoma

**DISCUSSION**

Sarcoidosis is rare granulomatous multi-system disorder characterized by the formation of non-caseating granulomas in the affected organs. Presence of non-caseating granulomas, absence lymphocyte collar and the presence of Schaumann and asteroid bodies were the diagnosis of Sarcoidosis. Presentation of Sarcoidosis ranges from asymptomatic to respiratory insufficiency, blindness, severe neurological disease, or myocardial damage. The involvement of inguinal lymph nodes is a very rare presentation of sarcoidosis, Monnet and Thevenon presented a similar case where an asymptomatic patient was diagnosed with lymph node biopsy. Mandi et al. reported that an inguinal lymph node biopsy may be of help for the diagnosis of sarcoidosis even in clinically asymptomatic patients. Peripheral edema is a rare mode of presentation in sarcoidosis. Obstructive symptoms due to lymphadenopathy, infiltration or tenosynovitis can also occur.

In the diagnosis of sarcoidosis, a combination of clinical, radiographic and histological findings is of diagnostic importance in a typical case. A young adult who has constitutional symptoms, respiratory symptoms, erythema nodosum, blurred vision and bilateral hilar lymphadenopathy can be easily diagnosed as compared to a case with more subtle findings. Extrapulmonary presentation of sarcoidosis can be missed because the...
clinical signs (e.g. peripheral lymphadenopathy, uveitis, liver or bone involvement) are not very apparent. Sarcoidosis occurring in almost all the sites of the body similar to tuberculosis can be confused with many other disorders.

The type of organs affected and the severity of sarcoidosis differ according to patient’s race and ethnicity. Nearly, 2–25% of the cases show peripheral lymph node involvement and that histological prevalence varies from 7.7 to 100%. The 3rd International Conference on sarcoidosis, showcased two studies which reported a high rate of positive peripheral lymph nodes biopsies in patients who had histologically proven sarcoidosis. Examination recommend that the peripheral lymph nodes like cervical, supraclavicular, axillary, inguinal, submandibular and epitrochlear lymph nodes should always be done in patients who were suspected to be suffering with sarcoidosis. In India, the most common differential for sarcoidosis is tuberculosis hence it is very important to be able to differentiate between the two entities. Sarcoidosis may regress symptomatically thus many patients do not get any specific treatment for it. Corticosteroids are the first choice (10–20 mg a day) of drugs for such patients. Methotrexate or azathioprine are used where steroids cannot be used.

CONCLUSION

Sarcoidosis is a rare but clinically important disorder that needs to be diagnosed carefully as it can be frequently confused with tuberculosis. Also, examination of peripheral lymph nodes should be stressed upon whenever we suspect sarcoidosis. In our case, we came across a rare presentation of sarcoidosis in the inguinal region.

LEARNING POINTS

- Biopsy has diagnostic value if peripheral lymph nodes are enlarged.
- Biopsy is an easy, convenient and practical method, hence it should be performed routinely.
- Biopsy has high sensitivity and low risk of complications.
- Atypical presentation of Sarcoidosis as peripheral lymphadenopathy, can be missed in asymptomatic cases. Hence it should be kept in mind that when examining a patient of suspected Sarcoidosis always pay attention to lymph node biopsy.

REFERENCES