TEACHING FILES

A 5 year old boy with fever since 9 months

Case Report: A 5 year old boy hailing from Uttar Pradesh presented with fever, recurrent swelling over right knee and ankle and anorexia since 9 months. He had been investigated for same by a private practitioner and in view of positive Mantoux test with high ESR (143 mm at end of 1 hour), he was started on 3 drug antituberculous therapy (AKT) since 3 months but there was no clinical improvement. On examination, he was malnourished with a weight of 11 kg, had generalized lymphadenopathy and no joint swelling. Other systemic examination was normal. Investigations showed hemoglobin of 11.7 mg/dl, WBC count of 22,100 cells/cumm (86% polymorphs, 14% lymphocytes) with ESR of 120 mm at end of 1 hour. Platelet count was 5,45,000/cumm. X-Ray Chest showed hilar lymphadenopathy with parahilar haziness on right side. Liver and renal function tests were normal. Ultrasound of abdomen showed multiple enlarged lymphnodes in mesentery, peripancreatic, and paraaortic region with largest measuring 0.6 x 1.6 cms. Barium meal follow through showed jejunal mucosal spikes suggestive of Tuberculosis. Axillary lymphnode biopsy showed reactive lymphadenopathy. His HIV ELISA was negative and serum immunoglobulins were normal. In view of recurrent joint swelling, autoimmune workup in form of ANA, ds DNA, RA factor were done which was negative. He was treated with 6 drug AKT and steroids. Steroids were tapered and stopped over a period of 2 months and AKT was shifted to 4 drugs. After 3 months of AKT, he again presented with fever since 15 days and subcutaneous nodules that disappeared within a day. He had gained weight of 2 kg in 3 months. On investigation, his X-Ray chest was the same and USG abdomen still showed presence of lymphnodes. WBC count had decreased to 18,300/cumm and ESR to 75 mm at end of 1 hour. A CT abdomen showed multiple large mesenteric lymphnodes. At this juncture, his serum angiotensin converting enzyme (ACE) levels were done to rule out sarcoidosis which was normal.

The child underwent a minilaprotomy and a large mesenteric lymphnode was excised which were caseating. Histopathology showed caseating granulomas suggestive of Koch's etiology though AFB stain was negative. Culture and sensitivity report showed resistance to INH, Rifampicin and Ethambutol.

Question: Why the axillary lymph node biopsy did not pick up Tuberculosis in the first place?

Expert's opinion: When a node biopsy is indicated, excisional biopsy of the most abnormal node will best enable the pathologist to determine a diagnosis. Since the most abnormal lymphnodes were in the abdomen, abdominal lymph node biopsy is most specific and sensitive and a peripheral lymph node biopsy may not lead to a proper diagnosis as was seen in this case. Thus, it is imperative that a lymph node biopsy should be done from the node that is most abnormal. Fine-needle aspiration is occasionally considered an alternative to excisional biopsy but often yields a high number of nondiagnostic results because of the small amount of tissue obtained and the inability to examine the architecture of the gland. In addition, there may be some risk of sinus tract formation, depending on the underlying pathology

Total Answers: 22 Correct answers: 4

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