

## Lymphadenopathy Which Evaded Clinical Diagnosis

Pooja Nair, M. Ramya, S. Divya, Mohandas M.S., K. Jagadeesan, T.M.R Panicker  
Department of Surgery, K. J. Hospital & K. J. Research Foundation, Chennai, India

Rheumatoid Arthritis is a chronic systemic inflammatory disease whose major manifestation is synovitis of multiple joints. It also affects subcutaneous tissue, bones, ligaments, tendons, eyes, mucous membrane and lymph nodes. Affecting nearly 1% of world's population, the disease is three times more common in women than in men.

Involvement of lymph nodes is most commonly seen as generalized lymphadenopathy. It is seen in 50-75% of the patients affected by rheumatoid arthritis. Most commonly noted features during histopathological examination are lymphoid hyperplasia with active germinal centers. Follicular hyperplasia and polyclonal B cells are also seen. Lymph nodes are generally painless and mobile.

### Several condition should considered in Differential diagnosis pulmonary tuberculosis

In pulmonary tuberculosis the hilar (often unilateral), paratracheal and mediastinal lymph nodes are involved. Supraclavicular spread occurs from the mediastinal. Extra pulmonary TB effects axillary and inguinal, nodes; other nodes may also be involved. These nodes are usually painless. They are initially mobile but become matted together in later stages. In the course of the disease these nodes undergo liquefaction and caseation and become fluctuant, this may also lead to abscess and sinus formation. In systemic lupus erythematous lymph nodes show necrotizing lesions and hematoxylin bodies. Multicentric lymphadenopathy is also noted. Immuno histochemistry study shows polyclonal plasma cells. In Burkitt's lymphoma, there is a diffuse infiltrate of atypical lymphoid cells with numerous mitoses and a prominent starry-sky pattern because of the presence of multiple tingible body macrophages. Burkitt-like lymphoma, sporadic, shows diffuse infiltrates of atypical lymphoid cells with abundant apoptotic debris and scattered tingible body macrophages. The neoplastic cells are more pleomorphic and overall slightly larger. Sarcoidosis presents with bilateral hilar lymphadenopathy. Lymph node biopsies show non-caseating granulomas that are negative for acid fast bacilli or fungi. 60-70% of patients with Hodgkin's Lymphoma have cervical lymphadenopathy. This usually presents with single enlarged lymph node that is firm n rubbery. Large tumor nodules showing lacunar classical Reed Steinberg cells are seen with lymphocytes and plasma cells in the background.

### CASE REPORT

19 years old female presented to the out patients department of K.J. Hospital with complaints of swelling in the right side of neck which was insidious in onset and progressive in nature. Patient had difficulty in breathing due to pain in costo-chondral joints and costo vertebral joints, loss of appetite and frequency in micturition and polyarthralgia. On systemic examination she was found to have mild enlargement of liver and spleen. Vitals were stable.

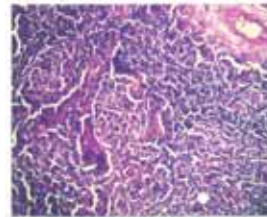
Swelling was present at right supraclavicular region it was about 3X4 cm in size which

was mobile and firm in consistency; right sternocleidomastoid muscle was pushed anteriorly. Routine hematological parameters were within normal limits Rheumatoid factor <10.1 IU/ml [ref:<15IU/ml] Antinuclear Antibody – positive; Anti-smith Antibodies-not detected DNA amplified for Mycobacterium tuberculosis by PCR-positive; Anti-U1 SNRP Antibodies – negative. Ultra sonogram of neck revealed multiple well demarcated encapsulated hypo echoic mass lesions with moderate vascularity. Multiple echogenic foci with tiny calcification on right side of neck. FNAC: smear showed scattered lymphocytes in a proteinaceous background. FNAB could not elicit lymph node architecture. Block dissection of right supraclavicular swelling was done and specimen sent for histo pathological examination. Microscopic examination showed follicular hyperplasia of lymph node, well formed germinal centers surrounded by well delineated mantle zones.

Lymph node IHC (Immuno Histochemistry) study: Positive staining for Bcl 2 outside gerimant center 9mantel zone); PAS: negative; CD 45 and CD 20: Normal; CD 30: Negative staining; Conclusive for follicular hyperplasia.

Although patient was started on ATT, good relief of symptoms was seen only after starting steroid therapy.

Treatment given included methotrexate 75 mg once weekly; Folic acid od; Decadron 3 mg bd; Rantac 150mg bd. With relief in symptoms, steroid therapy was tapered. Patient has been off steroids for last three months.



Active Germinal centres

### DISCUSSION

The patient had complaint of difficulty in breathing which mislead to attribute it to pulmonological or cardiological cause. On further detailed history taking the pain during movement of chest wall was the main cause of discomfort. Lymphadenopathy is generally contributed to tuberculosis especially in India because of high rate of prevalence of the disease in the subcontinent. But it is important to rule out other cause for effective management of the adenopathy. Lymphadenopathy in rheumatoid arthritis may not just be a manifestation of joint inflammation but an active competent of this multisystem disease and reflects a widespread immunological abnormality.

### BIBLIOGRAPHY

- 1) GM Kondratowicz, D P Symmons, P A bacon, R A Mageed, and E L Jones
- 2) Loachim's lymph node pathology By Harry L. loachim, L. Jeffrey Medeiros.
- 3) Motulsky Ag, Weinberg S, Saphir O, Rosenberg E. Lymph nodes in rheumatoid arthritis.
- 4) Rheumatoid lymphadenopathy; a morphological and immunohistochemical study.
- 5) Robertson MDF, hart FD, White WF, Nuki G Boardman PL. Rheumatoid lymphadenopathy.

Correspondence: Dr. K. Jagadeesan, Founder & Director, K. J., Research Foundation, Director, K.J Hospital Research and PG Centre, 182, Poonamalle HighRoad, Chennai-600084, India Fax: 044-26411886 e-mail: kjresearchfoundation@gmail.com

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The present issue marks the 25<sup>th</sup> year of publication of the Journal International Medical Sciences Academy. It is a matter of pride for all fellows/members that Journal Selection Committee (constituted by ICMR), in its meeting held on August 3, 2011, has approved the indexing of JIMSA in IndMED, the best known Indian Medical Database <http://indmed.nic.in>. The Journal will host full text of the articles at MedIND <http://medind.nic.in> and the readers will have access to the full text of articles from January-March 2003 onwards. These articles will be linked for IndMED to JIMSA website.

I wish to express my gratitude for the help and guidance received from the Members of Board of Trustees and the Central Executive Committee members, of International Medical Sciences Academy, World Headquarters, New Delhi. I am also grateful for the valuable cooperation extended by the members of JIMSA Editorial and Advisory Boards; and also the peer reviewers, for their consistent and continuous effort and support to maintain a high standard of quality of the articles published in the journal.

Friends, this is an important milestone in the history of our journal; this will broaden accessibility to all published articles. The journal should now attract original articles of even better quality.

We should enforce rigorous peer review of the submitted articles and also on time publication of the issue, every quarter.

Editor, JIMSA