

Cervical lymphadenopathy in pregnancy: Need for early biopsy

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CASE REPORT

A 27-year-old multigravida at 26 plus 5 weeks period of gestation (POG) with a previous cesarean section was referred to our outpatient department (OPD). She had swelling in the neck region for the past one and a half years. The swelling was noticed after her first childbirth in 2022. She had been empirically treated with anti-tubercular therapy (ATT) for nine months. However, her symptoms had not subsided. She had no complaints of fever, malaise, or night sweats during the presentation. There was no contact with tuberculosis.

On examination, her vitals were stable. She had bilateral supraclavicular, cervical, and left axillary lymphadenopathy (Figure 1). The lymph nodes were matted, firm, non-mobile, non-tender, and not associated with skin changes or discharging sinuses. There was no organomegaly on abdominal examination, the uterus was 24 weeks, and the fetal heart rate was present.

The biopsy of the lymph node came out to be Hodgkin lymphoma—classical type. Magnetic resonance imaging of the chest, abdomen, and pelvis was done due to the potential radiation effects of computed tomography (CT) on the fetus. It revealed multiple enlarged



Figure 1: Front and lateral image of the patient showing enlarged cervical lymph nodes (red arrow).

cervical, supraclavicular, para-aortic, para-caval, and retroperitoneal lymph nodes with the left common iliac and axillary node enlargement. A diagnosis of stage 3 Hodgkin's lymphoma was made. After a discussion with a multidisciplinary team involving obstetricians and medical oncologists, the decision was taken for conservative management and to start chemotherapy after delivery. A summary of the patient's obstetric follow-up is given below (Table 1).

The patient was on regular follow-up in medical oncology and obstetric departments. At 36 +5 weeks of gestation, the patient was admitted for elective cesarean section because of a previous section with fetal growth restriction with oligohydramnios, and a cesarean section was done at 37 weeks. An alive female baby weighing 2.1 kilograms with APGAR 8 and 10 was delivered. The intraoperative period was uneventful, and the patient recovered completely. Positron emission tomography-computed tomography (PET-CT) done in the postpartum period revealed no progression in lesions compared to the previous magnetic resonance imaging (MRI). One-week post-surgery chemotherapy was started (ABVD—Adriamycin, Bleomycin, Vinblastine, Dacarbazine), and the patient was discharged on postoperative day 8 with allopurinol and low molecular weight heparin for postpartum thromboprophylaxis. Currently, she has

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Table 1: Follow-up of the patient in antenatal OPD

Period of gestation	Examination	Relevant investigation
26+5 weeks	Uterus 24 weeks; Fetal heart sound +	Complete blood count (CBC): 10.4/8580/3.1 lakhs Liver and renal function test: normal TSH: 0.784 Urine microscopy: normal NT/NB scan: normal Anomaly scan: no gross congenital malformation
30+5 weeks	Vitals stable PA-Uterus 28 weeks; Fetal heart sounds+	Glucose tolerance test: 69/96/97 CBC: 10.1/8530/3.1 lakhs
34+5 weeks	PA-Uterus 32 weeks; Fetal heart sound +	Growth scan: Single live intrauterine fetus Cephalic Estimated fetal weight: 1.3 kg less than 3rd. Centile for that period of gestation Single vertical pocket 3.3 cm Doppler normal
36+5 weeks	PA-Uterus 34 weeks; Fetal heart sound +liquor appears reduced	USG-Single live intra-uterine fetus Cephalic Estimated fetal weight 2.5 kg AFI-4.5 Doppler normal CBC: 13.2/14460/2.04 lakhs Renal and liver function tests within normal limits

Abbreviations: AFI: Amniotic fluid index; NT/NB: Nuchal translucency/nasal bone scan; PA: Per abdomen.

received five cycles of chemotherapy, and the recent PET-CT showed 80% resolution of the lesion compared to pre-chemotherapy (Figure 2). She is planning for further cycles of chemotherapy. The baby is 5 months old and weighs 5 kilograms, with normal milestone development.

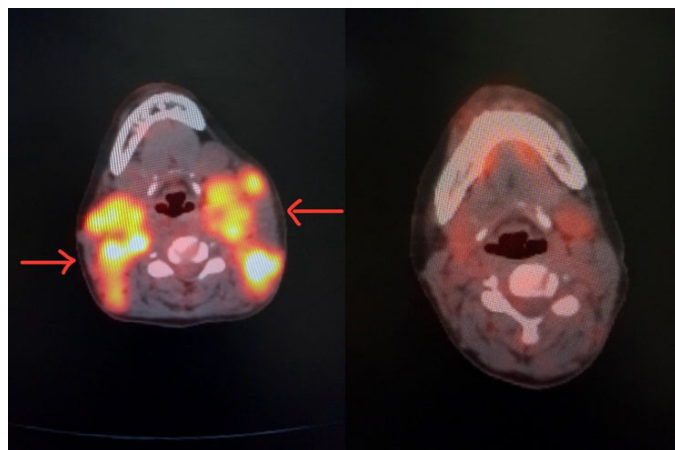


Figure 2: PET-CT image showing enhancing cervical lymph nodes in the immediate postpartum period (left side; red arrows) which had resolved following chemotherapy (right side).

DISCUSSION

Cervical lymphadenopathy refers to abnormal enlargement of lymph nodes in the neck. The causes can vary according to the age of the patient and geographical area from infection to malignancy. Considering the chronic

symptoms and high prevalence in India tuberculosis is one of the primary differential diagnoses. However, our patient had already taken ATT and the symptoms have not improved. Studies have shown about 50% of lymphadenopathy is due to non-tuberculosis causes and human immunodeficiency virus (HIV) and lymphoma should always be considered in inconclusive cases [1–3]. Lymphomas are the fourth most common malignancy presenting in pregnancy with Hodgkin’s being the most common [4]. However, lymphomas presenting as cervical lymphadenopathy in pregnancy have not been reported. In a study conducted in India of all the cases presenting with cervical lymphadenopathy, only 8% had Hodgkin lymphoma [5].

In such cases, an excisional biopsy with histopathology is recommended for definitive diagnosis [6]. Due to the high proportion of cases of tuberculosis and poor patient follow-up many cases have been started on empirical therapy on initial presentation. Hence even in resource-poor settings like India, a fine needle aspiration cytology (FNAC) or biopsy is necessary before empirical therapy. This patient had no constitutional symptoms like fever or weight loss. A biopsy should have been considered in the initial presentation itself. Thus, this case report tells the importance of biopsy in all cases of cervical lymphadenopathy. Another possible cause to be ruled out is the co-existence of lymphoma and tuberculosis due to the immune-compromised state [7, 8], which is unlikely in our patient as the lymph nodes did not resolve after starting treatment.

CONCLUSION

Non-tuberculosis causes of cervical lymphadenopathy should always be considered, even in high-prevalence areas. An excisional biopsy of the nodes should be done in all cases without starting empirical ATT. The probable clues to non-TB etiology are supraclavicular lymphadenopathy, no contact with tuberculosis, lack of constitutional symptoms, and lack of response after eight weeks of ATT treatment.

Keywords: Cervical lymphadenopathy, Hodgkin lymphoma, Pregnancy, Tuberculosis

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Author Contributions

Kanagavarshani Murali – Conception of the work, Design of the work, Acquisition of data, Analysis of data, Interpretation of data, Drafting the work, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Alekya Mittapally – Conception of the work, Design of the work, Acquisition of data, Analysis of data, Interpretation of data, Drafting the work, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

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Conflict of Interest

Authors declare no conflict of interest.

Data Availability

All relevant data are within the paper and its Supporting Information files.

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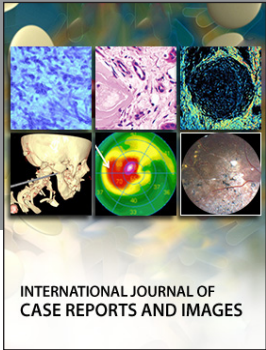
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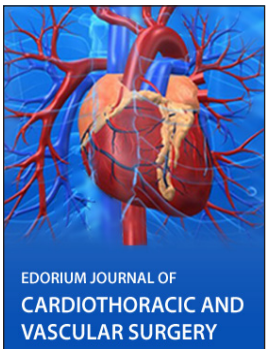
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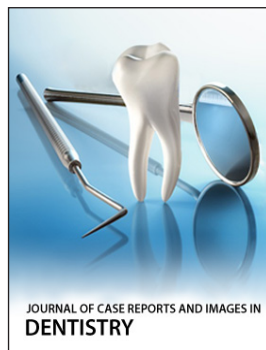
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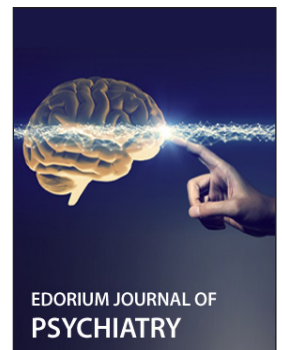
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