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Case Report

Splenic Tuberculosis – A Rare Case Presentaton

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Abstract:

Extrapulmonary Tuberculosis is showing an increasing trend across the globe.Splenic TB is a rare form of abdominal tuberculosis.It is mostly seen in the immunocompromised individuals.Here is a case of 71 year old male who is a known case of Carcinoma Stomach who is on chemotherapy and radiotherapy, histopathological examinationwas suggestive of splenic tuberculosis.

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Introduction –

Tuberculosis is an important heath issue in the developing countries, with varying clinical presentation depending on the organ involved.Extra pulmonary accounts for 15 – 20 % of all tuberculosis.1

Splenic Tuberculosis is a rare form of TB.2,3

Patients acquiring splenic tuberculosis have some risk factors such as Immunosuppression,pyogenic infections,splenic abnormalities or trauma, sickle cell disease.

Case Report –

A 71 year old male who is known case of Carcinoma Stomach receiving chemotherapy and radiotherapy now came with complaints of high grade fever since 2 weeks, left sided abdominal pain non radiating type and unrelated to food

intake, not associated with nausea/vomitings/malena/change of bowel habits.On physical examination he was lean and enlarged palpable spleen was noted on abdominal examination.He is on regular cycles of chemotherapy.On Regular follow up PET Scan showed Fresh appearnce of Multiple FDG avid nodular lesion in spleen.On USG guided Splenic biopsy microscopic examination showed large areas of necrosis focally surrounded by epitheloid cells and langhans type gaint cells.There was no evidence of atypical cells.Granulomatous inflammation suggestive of Kochs etiology.

Discussion –

Tuberculosis presenst as pulmonary or extra pulmonary disease.Extra pulmonary Tb accounts for 15 – 20 % of all tuberculosis.4

Splenic Tuberculosis presents as two forms. First form is as a part of Miliary Tuberculosis splenic involvement is seen which is common, mostly seen in immunocompromised individuals.Spleen is the third most common organ which is affected in Miliary tuberculosis. 5

Second form which is the rare presentation wherein primary involvement of spleen is seen.When spleen is involved lesions may be seen as tuberculoma or tubercular abscess.

Majority of cases of splenic tuberculosis are seen in the immunocompromised individuals,only few rare form of sporadic cases of splenic tuberculosis is seen in immunocompetent individuals.

Individuals with splenic Tb presents with wide varying symptoms which may include pyrexia of unkown origin(PUO),weight loss and Abdominal symptoms (pain abdomen,splenomegaly).There are no specific symptoms for diagnosis of splenic tuberculosis.

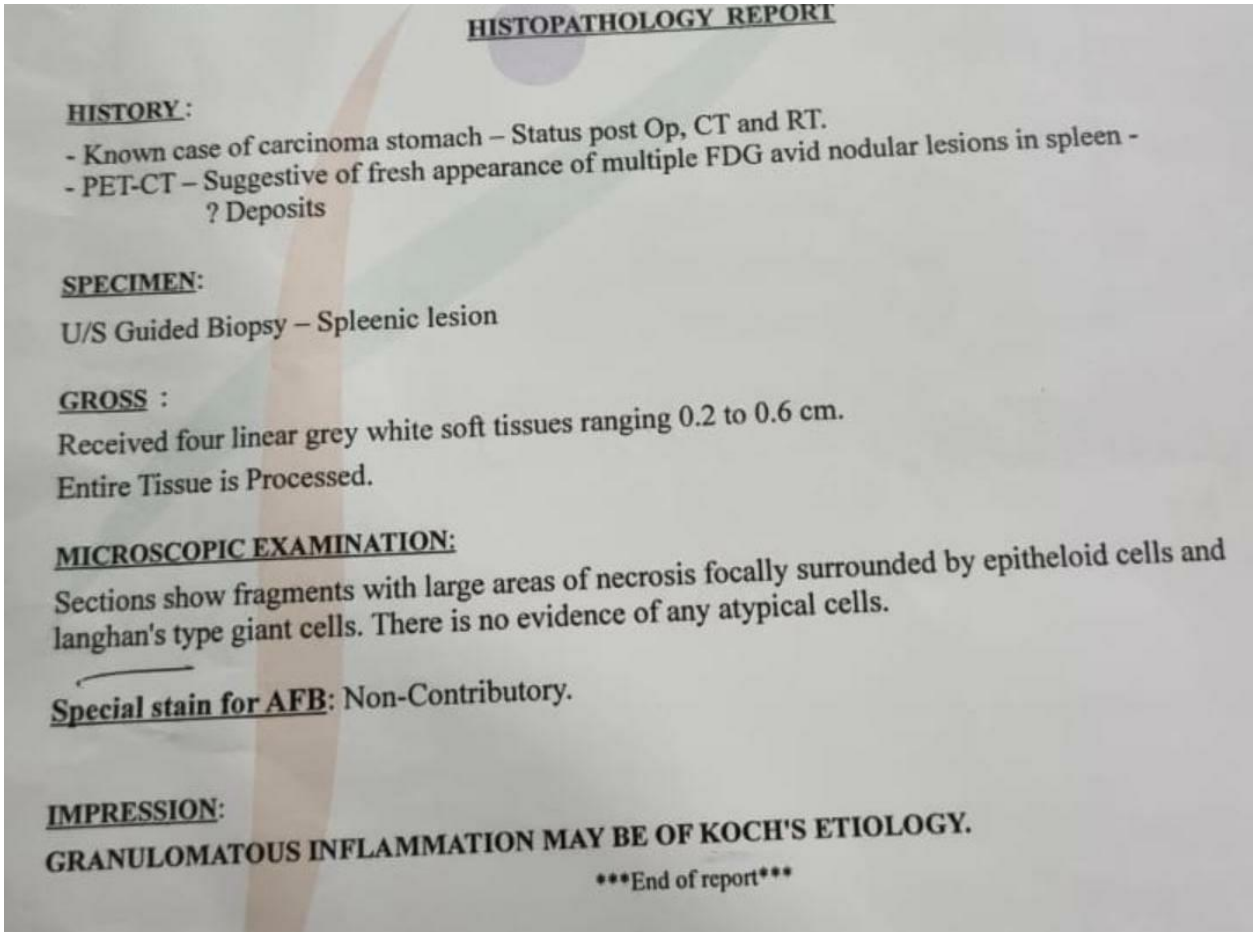
Generally USG and CT scan are perfomed for diagnosis. Ultrasound examination is simple, non-invasive and useful. There are 5 types of pathomorphological classifications for splenic TB including miliary TB, nodular TB, tuberculous spleen abscess, calcific TB and mixed type TB.CT Scan helps in diagnosis of splenic abscess or rupture.

In this patient CBP showed no obvious abnormalities and no malignant cells.ESR was slightly raised.Clotting factors were normal.Viral screening was normal. LFT was within normal range.Inflammatory markers were within normal limits. Patient was subjected to routine blood test and cultures. Coagulation profile was normal.APTT and INR were within normal limits.Patient had no history of blood disorders in family.No features suggestive of sickle cell triat or disease.No signs of hepatomegaly or portal hypertension on examination.Patient was a social drinker with alcohol consumption of only 15ml-30ml wiskey per week. No family history significant for hemoglobinopathies.No signs of connective tissue disease, no history of joint pain.Serum calcium was normal. Serum ACE levels were within normal limits .No features/ history suggestive of any inborn errors of metabolism. Qbc test for malaria/peripheral smear for malaria parasite was negative. Cue showed no presence of rbc aand pus cells.

In this case who is a known case of stomach carcinoma PET CT was done as a follow up which showed multiple FDG avid nodular lesionsin spleen.On histo pathological examination large areas of necrosis focally surrounded by epitheloid cells and langehans type gaint cells.There is no evidence of atypical cells, hence ruling out malignant spread.This was suggestive of splenic tuberculosis.

Diagnosis of solitary splenic tuberculosis is difficult and is also delayed as the clinical symptoms are vague.For confirmatory diagnosis of splenic Tb along with radiological evidence, pathological examination is required.Hence histopathological examination from biopsy sample is needed or from splenectomy specimen.Real Time PCR is the investigation for confirming tuberculat bacilli in the specimen.

For management of the splenic tuberculosis Anti Tubercular Therapy is of much importance.Treatment should be followed in accordance with – proper dosages,timely treatment and compliance to the treatment.The duration of ATT varies but usually lasts for 9 months to 1 year in immunocompromised individuals.In cases wherein the medical management is not useful,then splenectomy is opted.



HISTOPATHOLOGY REPORT

HISTORY:
- Known case of carcinoma stomach – Status post Op, CT and RT.
- PET-CT – Suggestive of fresh appearance of multiple FDG avid nodular lesions in spleen - ? Deposits

SPECIMEN:
U/S Guided Biopsy – Spleenic lesion

GROSS :
Received four linear grey white soft tissues ranging 0.2 to 0.6 cm.
Entire Tissue is Processed.

MICROSCOPIC EXAMINATION:
Sections show fragments with large areas of necrosis focally surrounded by epitheloid cells and langhan's type giant cells. There is no evidence of any atypical cells.

Special stain for AFB: Non-Contributory.

IMPRESSION:
GRANULOMATOUS INFLAMMATION MAY BE OF KOCH'S ETIOLOGY.

End of report

HISTOPATHOLOGY REPORT

Conclusion –

Splenic tuberculosis is the rare presentation of extra pulmonary tuberculosis.Commonly seen amoung the immunocompromised individuals.It is difficult to be diagnosed.Shows non specific symptoms.Splenic Tuberculosis should be evaluated as a differential diagnosis in the case wherein there is a splenic mass/abdominal pain/fever, especially in the endemic conteries.Anti Tuberculosis Treatment is the first choice for the management pf splenic Tb.

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