Post Partum Mystery Unravelled By Laparoscopy

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Abstract:
Presentation of tuberculosis in the post partum period is extremely rare. Diagnosis is often difficult due to its non specific, clinical, laboratory and radiological findings. This compounded by its presentation in the puerperal period provided a tough assignment to diagnose. Pelvic tuberculosis may often mimic various gynaecological disorders such as CA Ovary and Pelvic inflammatory disease hence clinical suspicion of the same is essential for careful diagnosis. We report two cases presenting in the puerperium with abdominal pain and fever that were diagnosed by post partum laparoscopy to be tuberculosis.

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I. Case Report 1

The First patient is a Primi para delivered at 32 weeks by spontaneous vaginal delivery with episiotomy presented on Post natal day 18 with complaints of fever for 15 days, history of nausea and vomiting associated with fever, chills and multiple episodes of loose stools. Patient had an uneventful antenatal period, until 32 weeks where she went through pre term labour. She delivered a live girl baby appropriate for gestational age weighing 1.6 kg. There was no history of Preterm Premature Rupture Of Membranes. Patient was referred after no response to multiple oral antibiotics.

- On admission (pnd 18)
  TEMP : 100 F
  PR : 96 BPM
  RR: 22 BPM
  BP: 120/80mm,

  CVS and RS normal
  Breast was soft no tenderness
  no calf muscle tenderness
  no pedal oedema

  P/A soft distension
  uterus was subinvoluted corresponding to 18 weeks size
  tenderness + in the lower abdomen
  p/s : minimal scanty lochia
  non foul smelling

  P/v: uterus 18 weeks size
  mild fornicial tenderness
  no mass palpable in the fornices

  P/r : Rectum was empty no mass felt in pouch of douglas.
  TC: 10,500
  ESR: 92
  HB: 9.3 gm/dl

  Patient was evaluated Panel sent showed Negative for Malaria, Dengue, WIDAL, HIV, HCV VDRL and Scrub typhus. Hanging drop was negative for vibrio cholera. CT abdomen done which showed ascitic fluid, and a sub involuted uterus.

  blood culture urine culture and vaginal culture were sent. USG guided pigtail catheter inserted and ascitic fluid collected. and sent for the following investigations WBC count : 280, RBC : 48 ; ADA : 218IU/L ; LDH : 3213; AFB smear was negative. Gram stain negative. GENE XPERT PCR for MTB negative. Aside from ADA and LDH being elevated all other investigations were negative for AFB.
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Patient was started on Inj.Piperacillin & tazobactam, Inj.Amikacin and Inj.Artesunate.
Due to acute exacerbation of symptoms (breathlessness and tachycardia), patient was shifted to ICU care.
Patient’s ascites worsened and she had multiple episodes of loose stools. Vaginal swab and urine culture were positive for E.Coli hence patient was treated for Post partum sepsis and antibiotics stepped up to Inj.Imipenem and Inj.Colistimethate.
Due to worsening clinical condition of the patient, she was taken up for diagnostic laparoscopy.
Adhesions noted from omentum and bowel to anterior abdominal wall. Uterus adherent to urinary bladder. Extensive peritonitis with pockets of frank pus present. The adhesions were released. Omental biopsy taken for HPE and ascitic fluid aspirated for AFB, biochemistry and pus culture and sensitivity. Extensive peritoneal wash was given with warm saline. One unit packed cell transfused.
24 hours after the laparoscopy, patient was afebrile.
The omental biopsy result showed granulomatous inflammation consistent with TB. Sections from omentum show multiple caseating epithelia granulomas with langhans type of giant cell consistent with Tuberculosis. Thus started on anti tubercular treatment. Antibiotics were discontinued and patient was discharged.

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II. Case Report 2

Mrs. S: A 30 year old P2L2A1 previous two LSCS had complaints of abdominal pain which started 1 month post partum and was admitted twice and was treated for puerperal sepsis. In spite of antibiotics the patient was not relieved of her symptoms. She presented to us for 10 months post delivery with pain in the lower abdomen and right iliac fossa. 

TEMP: Afebrile
PR: 80 bpm
RR: 18 cycles/min
P/A: Soft
Right iliac fossa tenderness+
4x4 cm mass palpable above the inguinal ligament.
P/S: cervix was healthy
no foul smelling discharge
P/V: Uterus was bulky
Right fornical tenderness +

Ultrasound abdomen showed free fluid in the abdomen in the parietal wall. CA 125 was 250 IU/ml.

MRI done showed: Enlarged Right ovary with lesion communicating with right inguinal and femoral region. With ruptured hemorrhagic ovarian cyst with chronic hematoma. Free fluid present. Small lesion anterosuperior to LSCS scar suggestive of post op adhesions. Patient was taken up for laparoscopy.

Intra op findings: Right sided tubo-ovarian mass adherent to deep inguinal ring and was released which resulted in release of caseous material. Left tube showed short stump adherent to omentum. Left ovary adherent to omentum and pelvic peritoneum showing multiple small tubercles. Surface of the uterus mildly inflamed. Upper abdomen normal. Caseous material was sent for gram stain and biopsy from omentum and ovary were sent for histopathology.

Gram stain of caseous material was positive for AFB. HPE was confirmatory of tuberculosis. Patient was started on ATT. Patient was doing well 1 year follow up with ATT.

III. Discussion:

As per WHO statistics, approximately 5 lakh women died from TB in 2014 throughout the world. Tuberculous peritonitis is a rare entity. Presentation in the post partum phase could be related to the immune suppressive state of the mother. Extreme vigilance and high degree of clinical suspicion is needed in endemic areas while dealing with unexplained abdominal symptoms even in the post partum phase.

These two consecutive cases show the wide range of clinical presentation of tuberculosis in the post partum phase. In the first case ADA and LDH were elevated in ascitic fluid study but GENE XPERT PCR was negative.

Case 2 Presented with post partial sepsis which continued to become chronic pelvic pain with raised CA 125 and a palpable mass per abdomen with ADA being negative. Diagnosis in both case scenarios were made my laparoscopy and HPE.

Presentation of Tb in the post partum period is very rare. There are limited studies in the presentation of extra pulmonary TB during the post partum period. Pregnancy being an immunocompromised state adds a theoretical risk for tuberculous infection.
IV. Conclusion:

These cases show the importance of laparoscopy in clinching the diagnosis of unresolved abdominal pain and fever in the post partum period.

References


[6]. Dr. Eugenio Volpi M.D., Ph.D., Dr. Marco Calgaro M.D., Dr. Annamaria Ferrero M.D., Ph.D., Dr. Luca Viganò M.D. Genital and peritoneal tuberculosis: Potential role of laparoscopy in diagnosis.