Peritoneal Tuberculosis

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Grand Rounds
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Case

Kings County Hospital Center

27M presented from OSH to KCHC ED after AMA from several days of non-operative management of partial SBO
Case

- 3 months diffuse abdominal pain, worsening
- nausea, bilious vomiting intermittently
- 20 lb weight loss
- night sweats
Case

NKDA
Denies PMH
Denies PSH
Denies meds

Cscope at OSH, reportedly negative
Case

Born and raised in Brooklyn
Hatian parents
Denies travel
Denies sick contacts
Case

PE

131/96  108
– mild diffuse tenderness
– significant distension
– fluid shift
– rectal negative for masses, blood
Case

cbc 6.5 / 10 / 31 / 486 70%

c7 135 / 4.1 / 98 / 23 / 5 / 0.7 / 102

lft 6.5 / 3.1 / 31 / 18 / 73 / 0.5 Am/Lip 85 / 65

abg 7.4 / 42 / 65 / 26 / 91 / +2.6
Pt underwent exploratory laparotomy for SBO based on exam and CT scan findings.

EBL 100  IVF 1500

Duration  30 min
Case

- grossly thickened peritoneum
- many peritoneal implants, whitish nodules
- thick and numerous adhesions bowel to bowel and bowel to abd wall
- 3L of straw colored ascites
  - peritoneal implant biopsy sent
  - cultures sent
Course

POD 1 – started on 4 anti-TB meds per ID

POD 3 – NGT discontinued

POD 4 – tolerated clears

POD 8 – discharged to home and DOT clinic
Course

4/27 – Peritoneal Fluid
- Cx NEG
- Anerobic NEG
- AFB NEG
- Fung NEG

4/27 – Peritoneal Bx
- AFB NEG
- Necrotizing granulomata

4/28 – Sputum AFB NEG
- HIV NEG

4/29 – Sputum AFB NEG

4/30 – Sputum AFB NEG
Tuberculosis

- 3 million deaths / yr worldwide

- increasing incidence due to HIV / AIDS and MDR Tb

- Extrapulmonary comprises ~ 22%
Miliary Tuberculosis

- John Jacob Manget – 1700’s

- blanket term

- hematogenous dissemination of *Mycobacterium tuberculosis*
Extrapulmonary Tuberculosis

- lymphatic
- genitourinary
- bone and joint
- meningeal
- miliary
- peritoneal (#6)
Peritoneal Tuberculosis

- insidious onset over months
- vague diffuse pain
- distension due to ascites
- fever
- night sweats
- weight loss
- confounded in most cases due to comorbidities
Peritoneal Tuberculosis

• “The great mimicker”

• Extremely difficult pre-operative diagnosis

• Only 16% associated with active pulmonary Tb

• PPD often not reactive
Findings

• extensive millet seed lesions throughout peritoneum, bowel, mesentery, omentum

• ascites
Findings

• Very similar to:
  – carcinomatosis
  – Crohn’s
  – sarcoidosis

• Therefore biopsy is key
Findings

• Ascites for AFB – less than 3% positive

• Ascites / Bx for culture – less than 20% positive (8 week incubation)

• Biopsy will demonstrate necrotizing granuloma
Treatment

- Same as principles as active pulmonary Tb
  - Quadruple drug regimen
  - Direct Observed Therapy
  - Initial phase – 6 to 8 weeks
  - Continuation phase – 4 months
Extrapulmonary tuberculosis is theorized to manifest via which of the following?

A. Lymphogenous spread
B. Hematogenous spread
C. Translocation
D. Dollar van
Pop Quiz

Acid Fast staining of ascites fluid will demonstrate AFB in what percentage of peritoneal tuberculosis?

A. < 5%
B. 10%
C. 50%
D. 85%
Thank you

Sabiston Textbook of Surgery. 18th ed.