ESIM 2016
Clinical Case Presentation

Rita Alasevičienė
Vilnius University Hospital Santariškių Clinics
LITHUANIA

Clinical case

- **Female**, **38** years old, current smoker.
- Medical history: tonsillitis, pneumonia.
- No history of TB, DM, nor family history. No medication use. No travelling abroad.

- Cold with fever **3 weeks** ago.
- **For 2 weeks**:
  - fatigue,
  - gradual abdominal enlargement, pain and nausea,
  - dyspnea on exertion,
  - fever **38°C** and perspiration,
  - decreased urination.

Clinical case

- **Physical:**
  - 95 kg. Normal skin and mucosa.
  - BT 36.6°C, HR 100 BPM, BP 120/70 mmHg.
  - BR **26** BPM. Auscultation – vesicular sounds, no rales.
  - Tense, painful abdominal enlargement.
  - Leg edema (-).

- **EKG:** sinus rhythm, 105 BPM, partial RBBB.

- **Abdominal sonography:** hepatomegalia (18 cm), splenomegaly (14 cm), ascites.

- **Surgeon:** ascites without surgical emergency.

Laboratory tests

CBC:

- WBC – **10.6x10^9/l** *(4.0-9.8)*
- Hgb – 151 g/l *(117-145)*
- MCV – **99** fl *(78-96)*
- MCH – **33.8** pg *(26-31)*
- PLT – **568x10^9/l** *(140-450)*

ESR – **53** mm/h *(<15)*.

Urine test:

- prot. **0.3** g/l
- gluc. – 5.5 mmol/l
- leuk – 8-7/HPF
- mucus – 3b.

Blood gasses – mild hypoxemia

Electrolytes, creatinine, α-amylase, ALT, AST, ALP, cholesterol – n.

Protein – **58** g/l *(66-83)*

LDH – **833** U/l *(125-243)*

CRP – **198.9** mg/l *(<5)*

Fibrinogen **6.72** g/l *(2-4)*

APTT, SPA, INR – normal

Making a preliminary diagnosis

Dyspnea	Ascites	Fever
pneumonia	liver failure	infection
left venticular failure	heart failure	paraneoplastic syndrome
PATE	infection	other?
ascites	malignancy	
other?	other?	

Further work-up plan???

Work-up

Ascitic tap: yellowish, SG 1.005, pro **45** g/l, gluc. 4.5 mmol/l.
Microscopy:

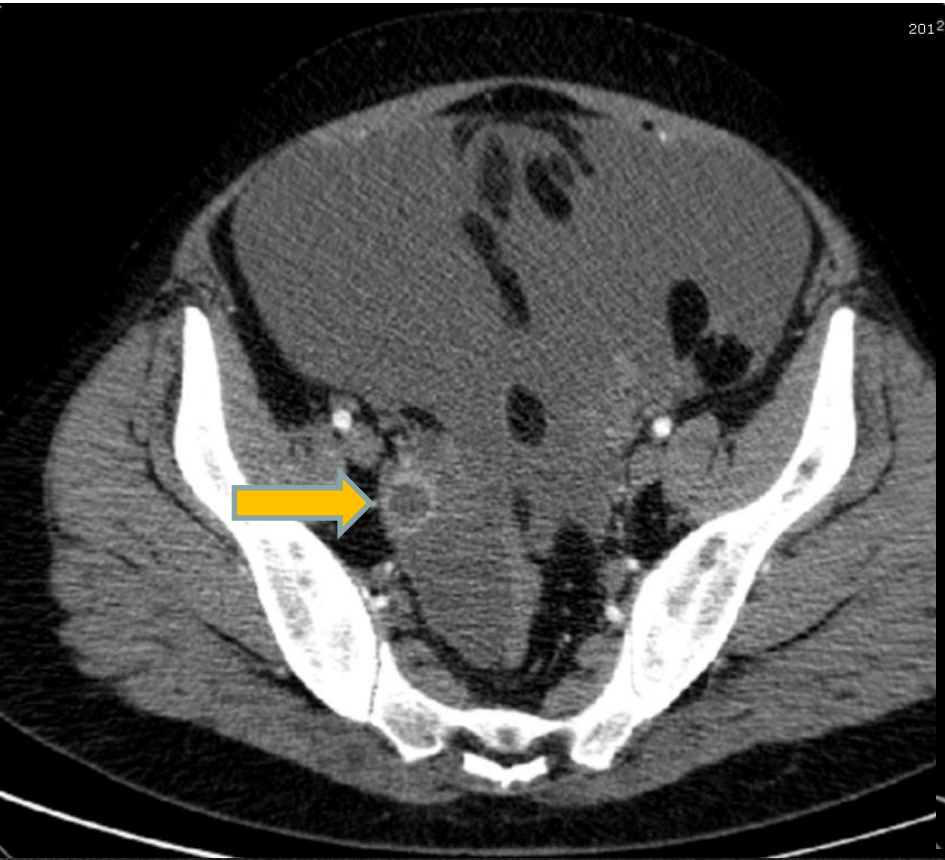
- WBC 5-6 /LPF, RBC 10-12 /LPF,
- collapsed cells,
- inflammatory components,
- piles of atypical cells with varied size nuclei and basophilic cytoplasm.
- AFB (-).

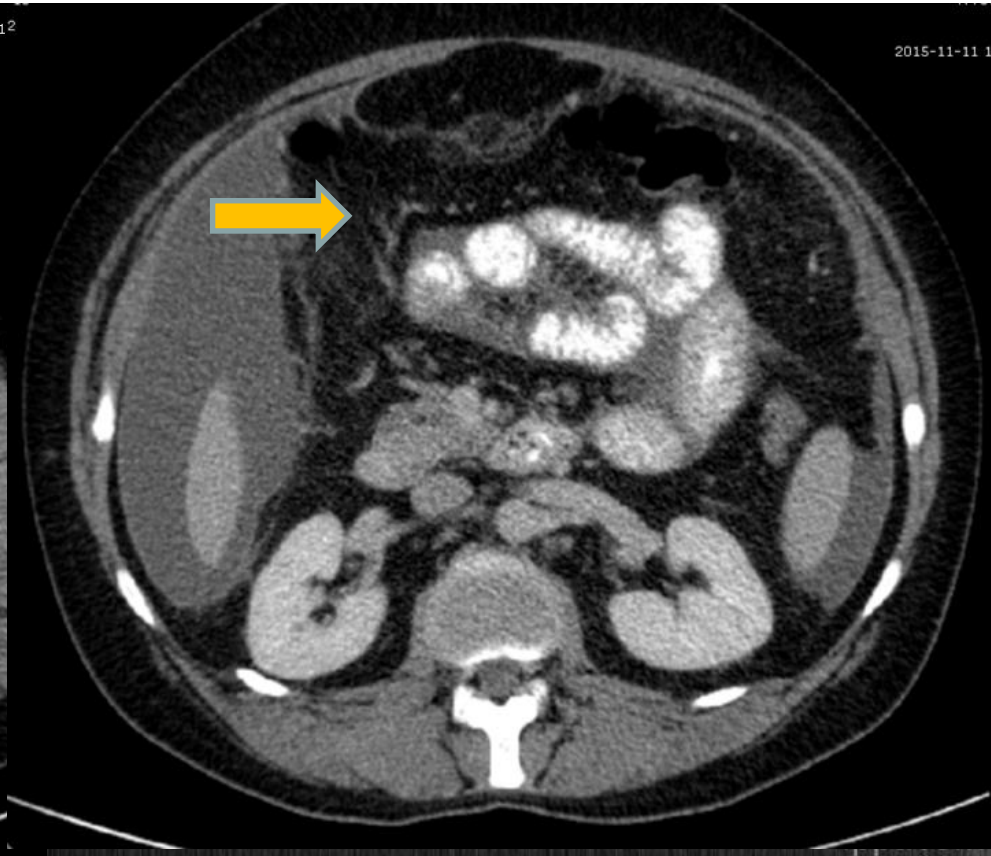
EFGDS: gastroesophageal and duodenogastral reflux, hiatal hernia, erythemic gastropathy.

Gynecologist (TVE): two-chamber cyst ~2.2 cm in the right ovary.

Abdominal and pelvic CT

- Ascites.
- Infiltrated mesentery with multiple lymph nodes.
- Right ovary cystic structure.
- Right pleural effusion.





Initial treatment

- Omeprazole PO
- Bemiparin SC
- Ciprofloxacin PO → fever ended
- **Diuretics** (Furosemidum & Spironolactone PO)

↳ **no effect** – gained 5 kg in 4 days

↳ Ascites drainage **6.5 L** in 6 days.

Transferred to Vilnius University Hospital for further investigation.

Dynamics and further work-up

- Urine test, LDH – n.
- HbsAg, anti HCV – neg.
- Protein **51.9** g/l *(64-83)*:
  - albumin – 42.6% *(48-61)*
  - α_1 – 7.4% *(2.5 - 5)*
  - **α_2 – 21.0%** *(8-11)*
  - β_1 – 8.7% *(3.1-8.5)*
  - β_2 – 6.6% *(2.5-5.5)*
  - γ – 13.7% *(16-25).*
- **CA 125 – 310 kU/l** *(<35)* – possible causes???
- **CXR** – no pathology.
- **Echocardiography** – slightly elevated PA resistance.
- **Ascites punctate** :
  - WBC **1.87**x109/l , Neu – 8%, **Ly – 89%**.
  - NO ATYPICAL CELLS.
- **Pelvic MRI**:
  - Ascites
  - Collapsed right ovary cyst
  - Diffuse mesentery thickening and contrast media accumulation with signs of restriction
  - Left obturator lymph node structure abnormality

Diagnostic laparoscopy + peritoneum biopsy:

› multiple peritoneal, intestinal, hepatic nodules < 1 mm.

Histology:

multiple epithelioid **granulomas** with multinucleated **giant foreign-body and Langhans-type cells** and **central necrosis**.

*No acid-resistant bacteria has been found, thus appropriate clinical correlation and additional microbiological tests are needed.

Clinical diagnosis:

Peritoneal and lymph node tuberculosis. Mesenteric lymphadenitis. Ascites. GERD.

- Transferred to Infectious diseases and TB hospital:
  - HIV (neg.), FBS, FCS, …
  - Specific treatment
  - **Contact person screening:**
    - **husband – active pulmonary TB**, probably ~ 6 months (fatigue).

Take home messages

- ✓ TB ascites presentation is non-specific.
- ✓ Paracentesis technique is of great importance.
- ✓ TB ascitic tap: **500-2500/ml cells + Ly > 70 % + protein ≥30 g/l**.
- ✓ Disseminated pelvic TB comprises 1-3% of all forms of TB.
- ✓ Approximately 15%-25% of cases with abdominal TB have concomitant pulmonary TB.
- ✓ **CA 125 commonly is elevated in pelvic TB.**
- ✓ Peritoneum nodules:
  - miliary TB – about 1 – 2 mm, slightly raised and whitish;
  - carcinomatosis – more vascular and more irregular.
- ✓ TB Dx – typical granuloma formation (epithelioid histiocytes and mononuclear inflammatory cells) in the absence of other Dx.

Precedent

ABDOMINAL SURGERY

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Primary Peritoneal Tuberculosis with Ascites and Elevated CA 125 Mimicking Advanced Ovarian Carcinoma: Case Report.

Dr. Zlatko Hrgovic
Tomislav Kulas
Danijel Bursac
Gordana Planinic Rados
Katarina Bojanic

Address for correspondence:
Dr. Zlatko Hrgovic
Frankfurt, Germany
Tel: +4969293000
Email: info@hrgovic

Thank you!

Welcome to Lithuania!