

## Presenting Complaint

41 year old, male with, 2 months diffuse abdominal pain & worsening abdominal distention, associated with nausea. Initially seen in the United States & treated for gastritis & H.pylori. ( eradication therapy ). Patient continued to have symptoms, i.e. unable to lie flat, insomnia due to pain. Past medical history is significant for Hepatitis b & cholecystectomy.

On physical exam, patient is alert, appears uncomfortable, abdomen is soft, no tenderness or guarding but generalised discomfort is present.

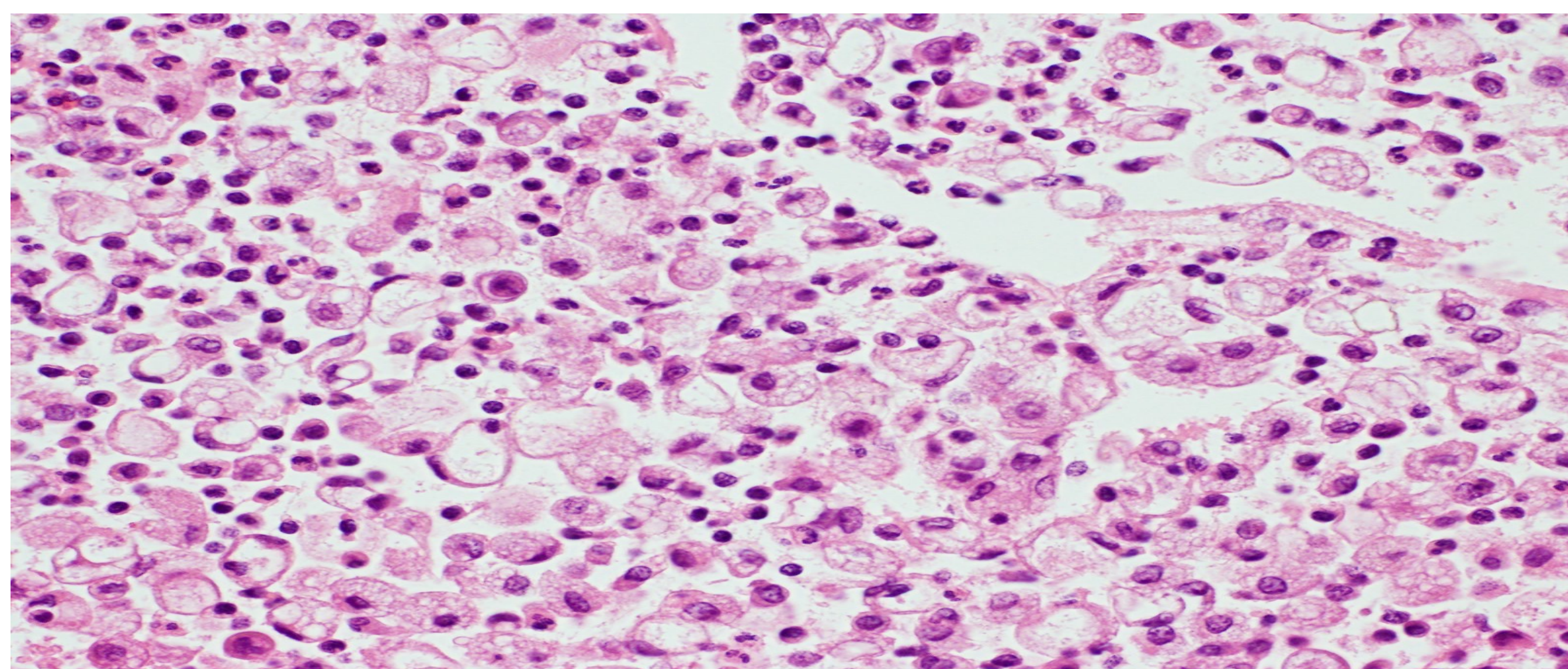
## Investigations & findings

### 2. CT abdomen & pelvis

- Diffuse attenuation of pancreas body & tail on both arterial portal venous as well as systemic venous phase.
- The main pancreatic duct is prominent measuring upto 4mm.
- Extensive nodularity seen involving entire peritoneal cavity extending to involve and surround the entire liver. This is also seen intimately related to the greater curvature of the stomach as well as occupying the entire lesser sac.
- The prostate is mildly enlarged 5 x 5 x 4 cm.
- A 3 mm nodule is seen within the right lung base.
- Multiple heterogenous infiltrates are seen within the omental fat anterolateral to the right colon and the transverse colon.
- Diffuse infiltrates are also seen extending along the left paracolic space and the peripancreatic fat.
- Stenosis of the splenic artery suggestive of partial encasement of the splenic vessel.

### 4. Cytology of ascitic fluid & Omental biopsy

- Mucinous adenocarcinoma – the immunohistochemical profile is most consistent with pancreatobiliary or upper gastrointestinal primary origin of the neoplasm. An image guided omental biopsy, depicts, metastatic mucinous adenocarcinoma extensively involving fibroadipose tissue
- Ascitic fluid cell count indicated elevated lymphocytic count ( 57.0% ; Normal = 10-15% ) and neutrophils were within normal ( <25 ) range.



LABS	
CRP	96.93 mg/L
<b>Ca 19-9</b>	<b>3471.8 U/mL</b>
Creatinine	73.70 umol/L
Amylase	43 IU/L
Lipase	44 U/L
<b>Serum Albumin</b>	<b>36 g/L</b>
<b>Ascitic Fluid Albumin Concentration</b>	<b>52 g/L</b>
Total Bilirubin	7.50 $\frac{\mu\text{mol}}{\text{L}}$
Direct Bilirubin	3.80 $\frac{\mu\text{mol}}{\text{L}}$
AST & ALT	11 IU/L & 10 IU/L
Neutrophil count	<25
<b>Lymphocytes</b>	<b>57%</b>

### Learning Point : SAAG

We calculate SAAG by using serum albumin and ascitic fluid albumin. The ratio helps us derive our differential diagnosis. In this patient,

$$\text{SAAG} = (\text{albumin concentration of serum}) / (\text{albumin concentration of ascitic fluid})$$

$$= (36 / 52) \text{ g/L} = 0.69 \text{ g/L}$$

