

זיקית מחליפה צבעים

ד"ר מאיה זבורובסקי
קפלן



- 84 (75) y/o woman Ethiopian origin
- DM
- Hyperlipidemia
- Aortic stenosis
- Osteoporosis
- Tx :gluben, simovil



- 3 months abdominal pain
- Weight loss 14 kg
- Physical examination- no significant finding exc 3/6 sys murmur
- Lab: N inc Ca 19-9 CEA
- Chest Rx –N



Patient: 03.11.0

Study Desc: ABD8-PANCR

Series Desc: ARTERIAL, iDose

Iodine

< 301 - 51 ARTERIAL >

DR MARINA&HIBA&GABI

100% Pixel

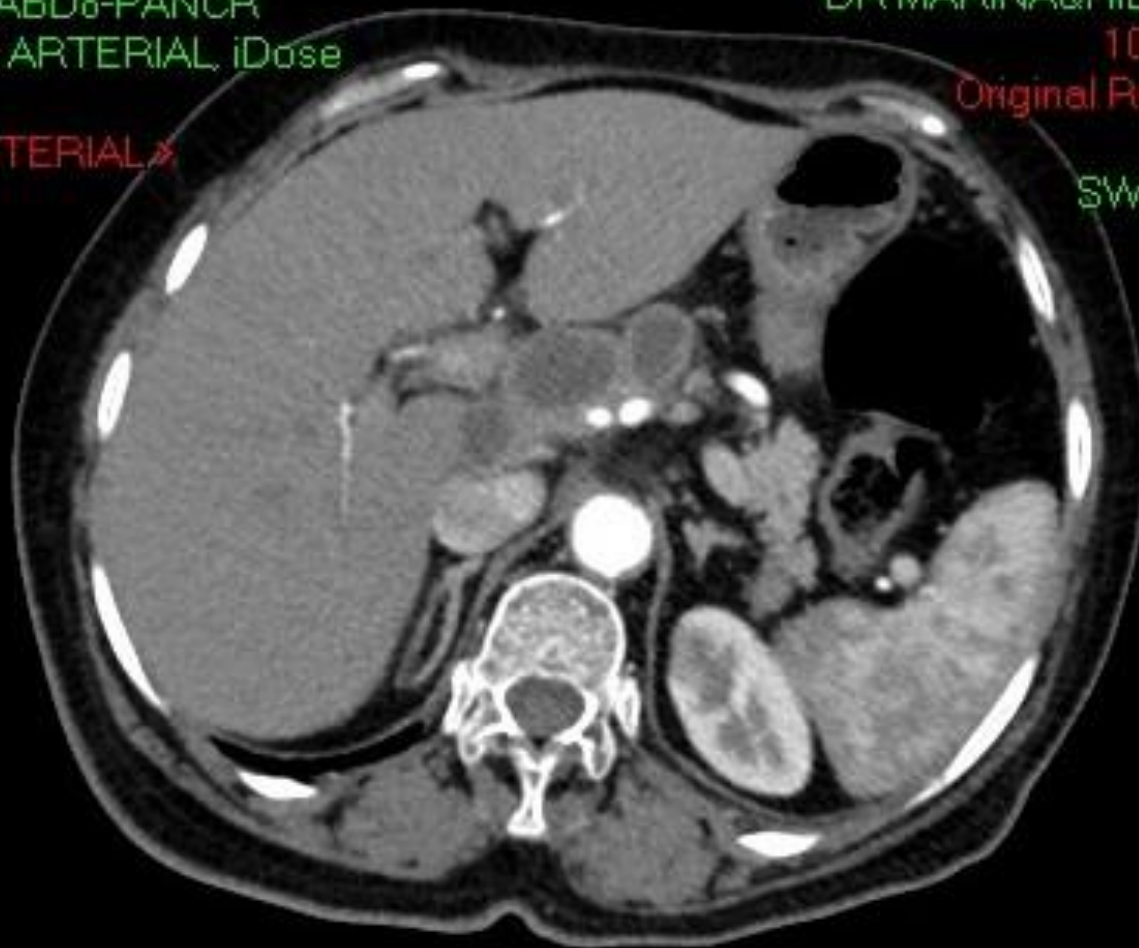
Original Resolution

SW 2.00 mm

Viewer

R

10 cm

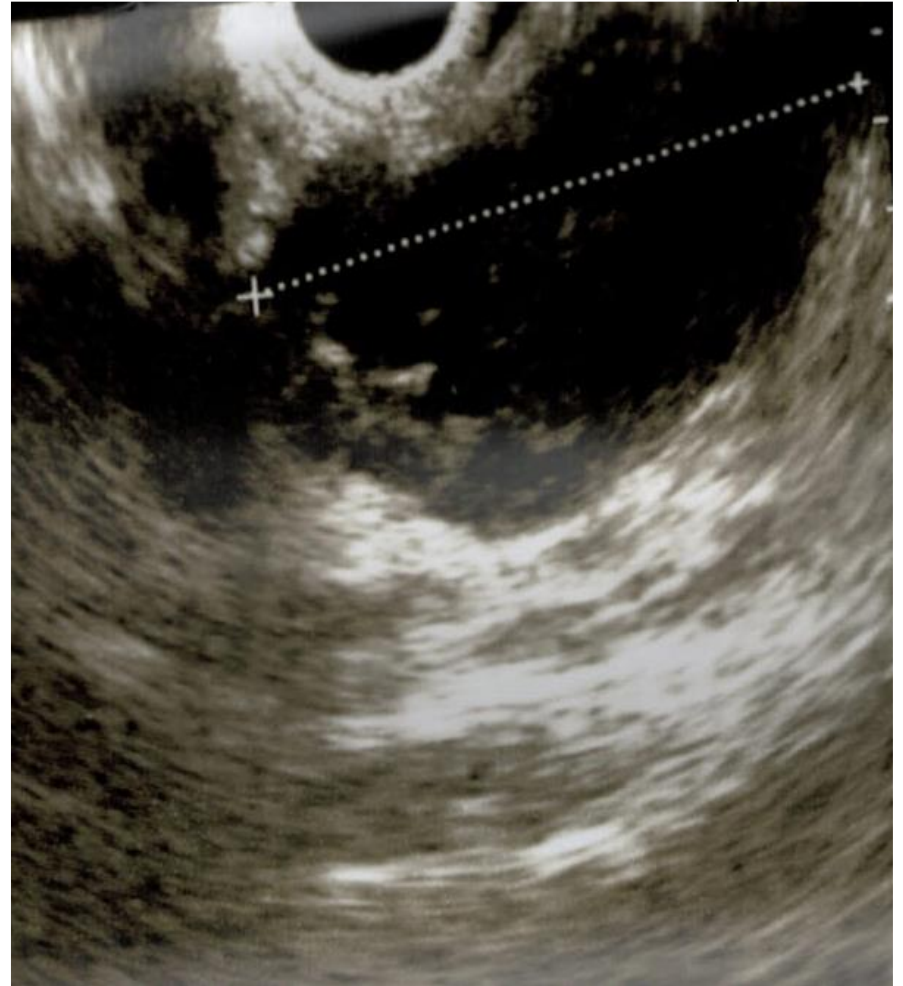
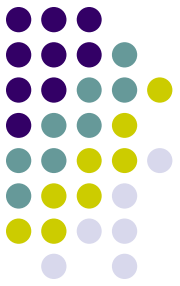




- 05/15 – At the head and neck of pancreas multiple cysts up to 26 mm
 - Interpreted as IPMT or mucinous SOL
- 08/15 – Multilocular cyst – diameter increased to 56 mm with contrast enhancement

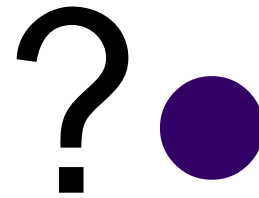
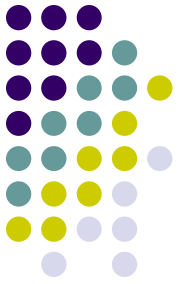
EUS – in the head of pancreas 30 mm multilocular cyst with debris, in the tail- second cyst 35 mm .

FNA- bloody fluid+ chylous/ pus?



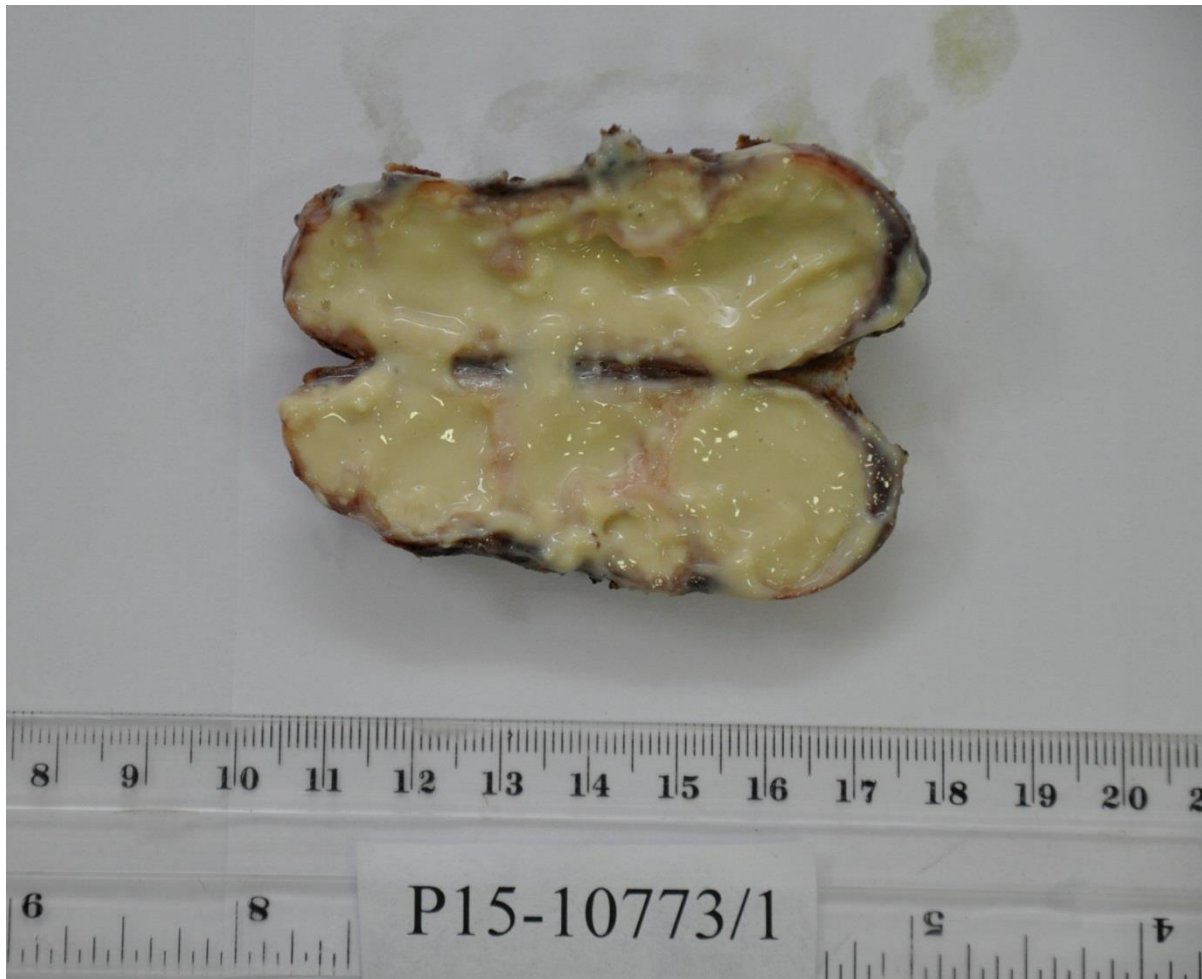


- FNA-
 - Amorphous material
 - Small lymphocytes staining pos for CD20 and CD3
 - No epithelial cells presents
 - Culture- neg
 - Chol 250, TG 140



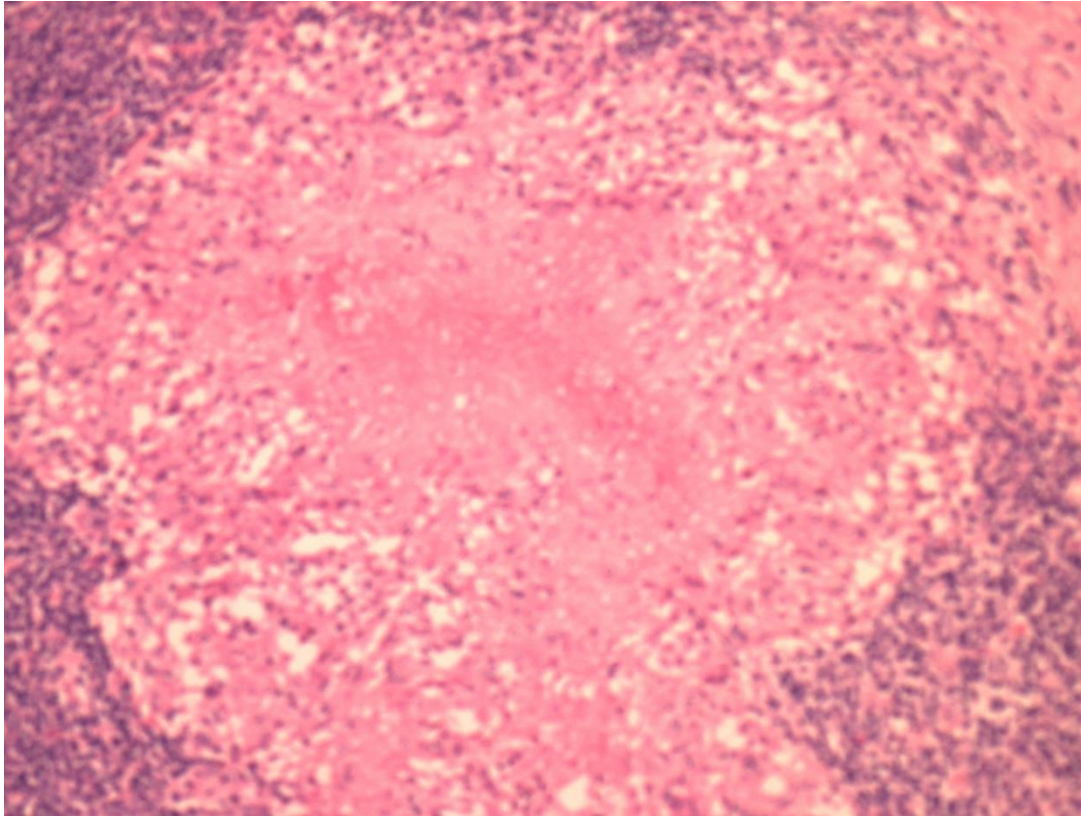
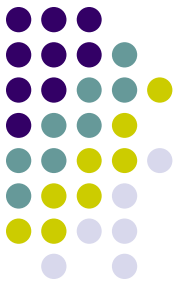


- Diagnostic laparoscopy
 - Superior to pancreatic head 7 cm semicystic- semisolid mass between IVC & hepatic veins

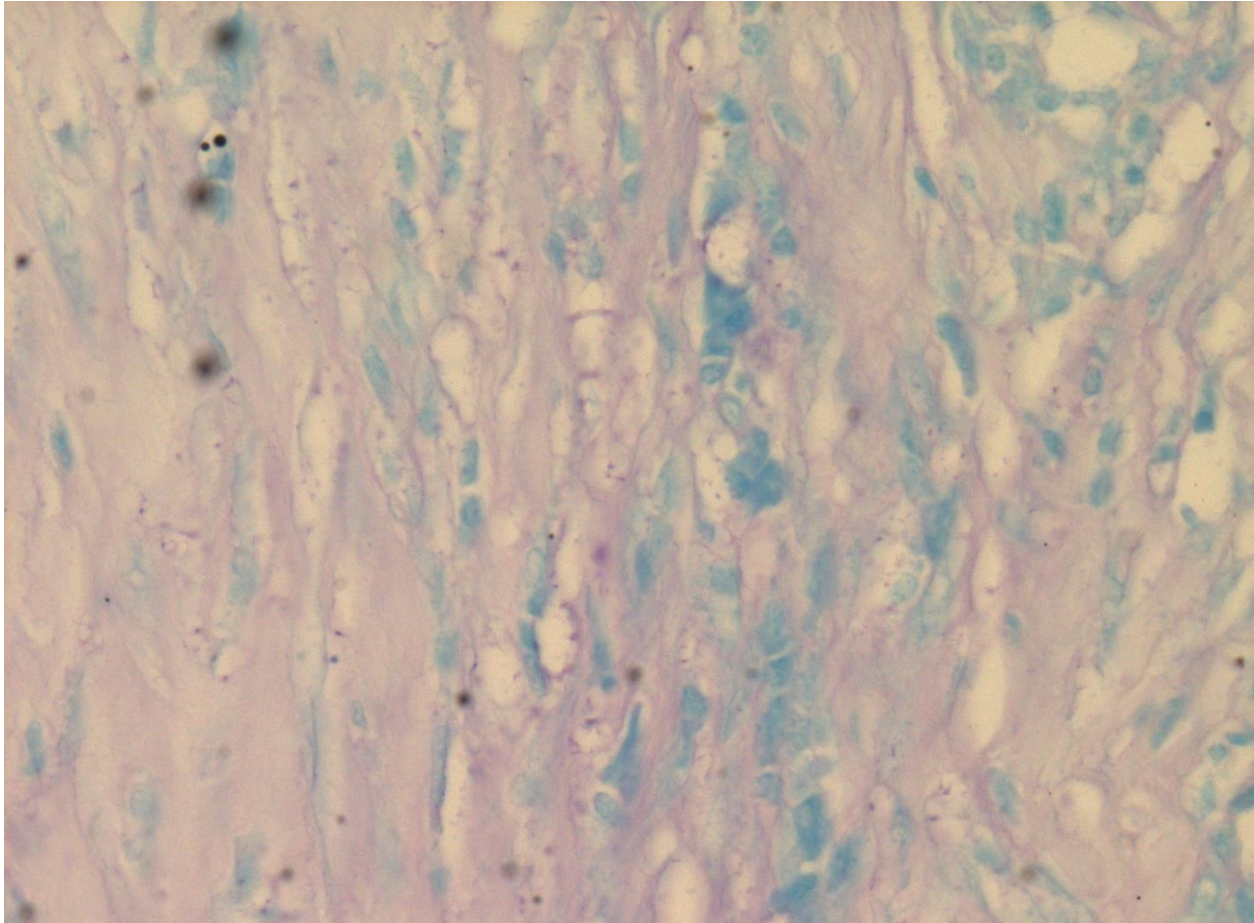
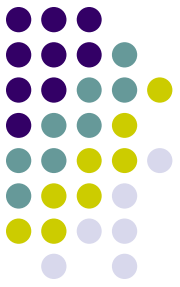


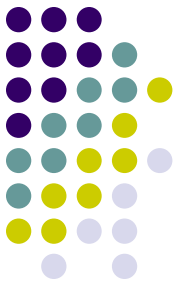
- Acknowledgements to Dr Barak Bar-Zakai

LN and adipose tissue containing necrotizing epithelioid granulomas



Ziehl-Neelsen pos for acid fast bacilli





Pancreatic tuberculosis



Pancreatic Tb

- Mycobacterium tuberculosis infects about 1/3 of the world's population
 - Both pulmonary and disseminated disease
 - 15% of cases involve extrapulmonary sites,
- Abdominal Tb is 6th most common site and includes infection anywhere in GIT, including pancreas
- Pancreatic Tb is seen most often in persons from underdeveloped or developing nations



Pancreatic Tb is rare

- 4.7% pancreatic involvement in autopsies of patients with miliary Tb (297 patients, Auerbachin, 1944)
- 2% pancreatic involvement out of 526 autopsies (Paraf, 1966)
- None in a review of 300 cases from India (Bhansali 1977)

Tb & pancreas involvement (Medline research 1966-2004) - 116 reports



- M=F
- Mean age 40 y
- Presentation:
 - Nonspecific symptoms:
 - abdominal pain -81%
 - weight loss 55%
 - low-grade fever- 36 %
 - Rec vomiting -19%



Other unusual presentations

- Acute pancreatitis
- Obstructive jaundice
- GI bleeding
- Pancreatic abscess
- Chronic pancreatitis
- Diabetes
- Splenic vein thrombosis



- Lab:
 - Elevated ESR
 - Anemia, lymphocytopenia
 - Hypertransaminasemia,
 - Elev alk phos (50% of cases)
- PPD pos 2/3
- Patients may/may not have had other forms of Tb in the past
 - Xia. World J of gastroenterology 2003



Pancreatic Tb

- Rare
- May mimic pancreatic malignancy
 - Clinically and radiologically
 - The usual diagnosis until FNA or surgery results are available
- < 50 % accuracy of CT/US guided FNA cytology or biopsy
- 80-95% accuracy of EUS-FNA



Co-infection

- 8 / 23 patients were co-infected with HIV
- The majority of these patients:
 - Have no history of pulmonary Tb
 - Suggesting latent reactivation after the initial of disseminated primary infection
- Tb should be considered in a person infected with HIV and a pancreatic mass
 - Mourad. J clin Gastr 1995

US



- Enlarged pancreas with focal hypoechoic or cystic lesions
- Peri-pancreatic and mesenteric lymphadenopathy
- Bowel wall thickening (usually in the ileocaecal region)
- Focal hepatic or splenic lesions
- Ascites

CT



- Solitary lesions with multiple cystic components without calcifications
- Contrast enhancement in septations
- Rim enhancement in the peripancreatic lymph nodes
- Normal PD
- Associated findings:
 - Ascites
 - Mural thickening of the ileocecal region
 - Peritoneal & mesenteric masses
 - Splenic and/or hepatic lesions

Diagnosis



- Presence of caseating granulomas
- Acid fast bacilli (AFB)
- Positive culture for *Mycobacterium tuberculosis*
- *PCR*



- Multi-drug anti-tuberculous chemotherapy for 6 - 12 months

Back to our patient 2010



- Family:
 - Son diagnosed with Tb
- Patient given preventive Tx (“malshach”)
 - Dyspnea
- CT chest- mediastinal lymphadenopathy
- PPD + 20 mm
- Bronchoscopy- normal, mucoid secretion culture & TB & cytology – neg



- HIV - neg
- CT chest – mediastinal lymphadenopathy
- “Malshach”

Prognosis



- Excellent with complete clinical resolution if organism not multidrug resistant