Surgical Forum
CASE PRESENTATION

Presented By: Ola AbdulAziz AlNaish

"6th year Student"

Supervised By:
Dr. AbdulRahman Al Shahwany

Dept. Of Surgery
Mosul Medical College
University of Mosul
Mosul - IRAQ
Name: N. T. In.
Age: 3 years
Sex: male
Residence: Anbar
Date of admission: 26th - Aug-2012
Date of operation: 28th - Aug-2012
Date of Exam: 30th - Aug-2012
Blood group: O+
C.C: abdominal pain for 1 month duration
H.P.I:

The Hx was taken from the parents 3yr. old male child with Hx of blunt trauma to the 6 months ago abdomen presented now with upper central abdominal pain of one month duration, which started as colicky in nature of moderate severity comes in attacks especially after eating continue for about 5 min & subsided spontaneously, no radiation, then it gradually increased in duration & severity in the the patient from sleep next few days that awake

It was associated with:

Vomiting: 2 attacks of vomiting which proceed the pain. non projectile, moderate amount, of food materials, no blood, no foul odor & no bad taste.
fever low grade, intermittent, relieved by cooling packs & antipyretics,

- retching, lethargy, malaise,

- good appetite & no wt. loss, no abdominal distention, no change in bowel habit.
So his parents took him to private clinic where he was Dx as having tonsillitis & gastroenteritis & treated accordingly by antibiotics, analgesics & antipyretics, the fever subsided but the pain persist.

His parents took him to Baghdad where he was thoroughly investigated & Dx was made as having upper abdominal mass, there he was given a trial of conservative Rx but the mass remain the same size, so they refer him to AL_Khansa'a private unit for operation.
Review of other systems: -ve

Past medical :: -ve

Past surgical :: Hx of blunt trauma to the abdomen 6 months ago that didn’t necessitated any intervention.

Drug & allergy :: no known allergy to any drug & no chronic drug use.

Family Hx :: -ve

Socioeconomic :: good socioeconomic state the father is employee ..
**LOCAL EXAMINATION**

**Inspection**: upper abdominal fullness & distention

**Palpation**: large rounded mass at the epigastric area, soft, regular outline, immobile, full the epigastrium, not tender, Apart from that the abd. is soft & not tender.

The mass is dull by **percussion**.

**Auscultation**: Normal bowel sound
INVESTIGATIONS ::

A. Laboratory Studies ::

Hb = 14 gm/dL.
ESR = 17 mm/hr
PT = 13.8 sec.
INR = 1.0
aPTT=28
Blood urea =24 mg/dl
S. creatinin =0.7 mg/dl
Sr. pancreatic amylase =89 U/l .. Normal value < 53 U/L
Sr. amylase (total) =174 U/l .. Normal Value < 100 U/L
B. Imaging Studies

1. Abdominal Ultrasound:

.. large about 9cm in diameter non homogenous cystic mass containing solid component involving the upper mid abdomen, at 1st thought to be distended fluid filled stomach but after 90 min the lesion still present, it seems to pancreatic mass... Done at 30th /July/ 2012
The next US done at 7th/Aug./2012 :: revealed pancreas is enlarged & irregular in outline, with large cystic lesion of non clear content .. 9*7 * 6.6 cm
1. Abdominal Ultrasound:

The next one was in 22nd Aug 2012.

The cyst became of 9.6*8*7.6 cm, in the tail of the pancreas, Echo free.
2. Abdominal CT scan

done at 8th /Aug./2012
the pancreas is enlarged with
large cystic lesion of non
homogenicity content 7*5 cm.
After contrast.. it show non
homogenous enhancement.
well defined oval shaped cystic mass measured 8*6.2 cm, surrounding the pancreatic gland, only the tail enhanced with IV contrast (the head, neck & body are not enhanced), with normal pancreatic duct,
From the Hx & Examination..What do you think this abdominal mass could be ??
So it’s ..

Pancreatic Pseudocyst
Operative Hx ::

He was admitted to AL_Khansa'a hospital at 26th/Aug

Pre-op .. he was also investigated ..

Chest X ray .. normal

HCV AB .. – ve

HBs Ag    – ve
the operation was done to him in 28\textsuperscript{th}/Aug, with \textit{transverse upper abdominal incision}, in the form of \textit{transgartric cystogastrostomy} ..& lasted 2hrs.

The parents were told that the operation passes smoothly without any complications & needed no blood transfusion ,

he regain consciousness on geting out of the theatre.
POST OPERATIVE Hx

The pt. was febrile of low grade in the first 2 days which was relieved by cooling packs & Paracetamol Inj.

The pt. only received IV F. (5% dextrose in 1/5NS, till day 2)

Urine pass in day 0,
Pass flatus in day 1,
by day 2 (when I saw him), pt. was afebrile, NG tube removed & the patient was discharged
Sample of the cystic fluid was sent for amylase level estimation & cytology:

**Amylase**

=773 somog IU/L

**Microscopically**

Large no. of foamy cell with groups of reactive cells.

**Cytology Results**

dense fibrous tissue formation & infl. Cell infiltration consistent with pseudocyst of the pancreas.
Pancreatic Pseudocyst
What’s *pseudocyst of the pancreas*?

Any Idea?!!
Definition

Collection of amylase rich fluid enclosed in a wall of fibrous or granulation tissue

Usually single

Doesn’t possess an epithelial Lining
Lesser sac
Organs involved:

Stomach, Duodenum, colon, mesocolon
Pathophysiology

1. Acute pancreatitis :: Necrosis

2. Chronic Pancreatitis :: Incre. duct pressure from stricture or ductal calculi.

3. Trauma
CLINICAL PRESENTATION:

Symptoms
1. Abdominal pain >3 we.
2. Nausea, vomiting
3. Bloating, indigestion.

Signs
1. Abdominal mass
2. Jaundice
3. Ascites
MANAGEMENT

**Investigations:**

**Biochemical /**
1. Serum lipase
2. Serum amylase

**Imaging:**
1. US
2. CT Scan
3. MRI
4. ERCP
5. Endoscopic ultrasound
Treatment ::

Goal..allow maturation of the wall

TPN or elemental diet

don’t wait if sepsis or hemorrhage

small ones may be medically treated
**Surgical Treatment**

- **Internal drainage**
  - Cystgastrostomy
  - Cystjejunostomy * Roux en-Y *

- **External drainage**
  - May cause pancreatic fistula ...

- **Excision**
  - Small, tail location
Open Transgastric cystogastrostomy
Laparoscopic cystogastrostomy
EXTERNAL DRAINAGE
## Complications

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<td>Vessel erosion</td>
<td>Hemorrhage into the cyst</td>
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<td>Hemoperitoneum</td>
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In **Children**, Pancreatic pseudocyst can occur following acute pancreatitis & trauma, But most common is the Trauma.

While in **Adults**, It’s most commonly occur following **acute pancreatitis**.
THANK YOU