## **Case Based Learning: Abdominal Pain**

**Case 1:** A 35 y/o male with a past medical history of asthma presents complaining of abdominal pain. The patient says that he has had the pain for 3 hours, the pain is located in the lower right part of his belly and came on rapidly and has been associated with vomiting and lack of appetite. The patient reports normal bowel movements, denies fever, and denies any drinking or drug use. Abdominal exam shows mild ttp in the rlq with no rebound or guarding, otherwise the abdominal exam is normal.

VS 105. 145/88 20 98% 99.8 Pain-10

What is your differential diagnosis at this time?

What initial interventions (not tests) would you like to perform?

What, if any, additional physical exam would you like to perform?

Exam shows a markedly tender rt testicle, and an absent cremasteric reflex.

What is the first line test for the suspected condition and what will a positive test show?

What labs would you like to order and why?

Are there any consults you would like to obtain?

Labs: Hb-13 WBC-13 Plt-265 Na-140 K-4.0 BUN/Cr 20/1 AST/ALT 40/40 Bili 1.0 Urinalysis- RBC-0 WBC-5 Leukocyte esterase-negative Nitrite-negative Bact-none

GU consult recommends and testicular ultrasound to rule out torsion.

Ultrasound shows an enlarged rt testicle and decreased arterial flow to the testicle.

What is the definitive treatment for the suspected condition?

Are there any other interventions you would like to perform?

Case 2: A 48 y/o male with a history of alcohol abuse, gastritis, htn, and diabetes presents with 12 hours of severe belly pain and non bloody vomiting. The patient had "a few drinks" before the episode started, and reports compliance with his meds. The patient is tender throughout the upper abdomen on exam with involuntary guarding VS 118 100/60 22 96% 99.4 Pain-10 FS-310

What is the differential diagnosis for this patient?

Are there any initial interventions you would like to perform?

What labs would you like to order and why?

Are there any bedside tests (EKG, portable X ray, Ultrasound) you would like to perform and why?

Lab results-WBC 15,000 Hgb-14.0 Plt 365 BUN 25 Cr 1.20 T Bili 1.0 AST-240 ALT 100 Alk Phos 88. Lipase 6,000.

What additional interventions/treatments would you like to perform at this time?

What consult if any would you like to obtain?

What is the mainstay of treatment for this condition?

**Case 3:** A 33 year old F with a history of constipation presents to the ED complaining of vomiting and rt sided abdominal pain, per patient she was fine yesterday but woke up with the pain today. The pain is described as being in the right lower abdomen, she has taken tylenol without relief. Exam shows a soft, nondistended belly with tenderness in the right lower quadrant.

VS 110 120/78 18 98% 98.8

What is the first piece of information you would like on this patient?

What are the initial interventions you would like to perform?

Are there any additional physical exam findings you would like?

Point of care pregnancy test is negative. The patient experiences relief after administration of 0.1mg/kg morphine. Pelvic exam shows rt sided adnexal tenderness, no cmt and no cervical discharge.

What is the first line study for the suspected condition?

What labs would you like to order and why?

Are there any consults you would like to obtain?

Labs Hb-13 WBC-13 Plt-265 Na-140 K-4.0 BUN/Cr 20/1 AST/ALT 40/40 Bili 1.0 Urinalysis- RBC-0 WBC-5 Leukocyte esterase-negative Nitrite-negative Bact-none

GYN consult recommends a pelvic ultrasound, and pre op labs

Pelvic Ultrasound shows decreased arterial flow to the right ovary and an enlarged rt ovary

What is the disposition? Are there any final interventions you would like to perform?

Case 4-A 75 y/o M with a history of htn, atrial fibrillation, and peptic ulcer presents to the ED complaining of rapid onset severe, diffuse abdominal pain. The patient reports feeling well yesterday, though has occasional bouts of mild belly pain. Physical exam shows a soft nondistended belly with no focal areas of tenderness.

Vitals: 105 108/66 20 98% 98.4 Pain-11

What is your differential diagnosis for this patient?

What initial interventions would you like to perform?

The patient improves a little after administration of morphine, and fluids are started. The patient still seems to be in discomfort though.

Are there any bedside tests you would like to perform and why?

Are there any labs you would like to order and why?

Labs Hb-13 WBC-13 Plt-265 Na-140 K-4.0 BUN/Cr 20/1 AST/ALT 40/40 Bili 1.0 Urinalysis- RBC-0 WBC-5 Leukocyte esterase-negative Nitrite-negative Bact-none Lactate-5.0 What is your revised differential diagnosis? What is the best study for the suspected condition? What consult would you like and why?