PRECISE EVALUATION
OF OLDER PATIENTS IN THE ED

Today you will be working in small groups in an effort to provide efficient but thorough care to your patients. You will have 50 minutes to evaluate 5 patients and prioritize your use of labs, XRAYs, history and physical exams to arrive at a diagnosis in the most precise manner. The team who spends the least and arrives at all the correct diagnosis will be the winner!

GUIDELINES:

1) Divide yourselves into groups of four or five participants.

2) Work as a team to prioritize your exams and tests in order to reach a diagnosis in all patients using the fewest resources.

3) For each case, designate a group leader to run the scenario and disclose the results. They will collect your payments for each piece of information in the workup.

4) A diagnosis will be given when the appropriate test or tests have been ordered.

5) Total the cost of all your interventions needed for each diagnosis.

6) Declare a winner!

7) Review Take Home Points

PRICE SHEET

HISTORY	**LAB TESTS**	**IMAGING**
PATIENT $50	CBC $50	US $100
ADDITIONAL $50	CHEM 7 $100	CXR $100
CALL TO REFERRING FACILITY: $50	CHEM 10 $150	3 WAY ABD $200
PHYSICAL EXAM	LFT'S $100	EXT. XRAY $200
BASIC $50	LIPASE $50	CT RENAL $1000
PELVIC $50	U/A $25	CT ABD $1500
RECTAL $25	ICON $25	MRI ABD $2500
MALE GU $25	LACTATE $100	MRI BRAIN $7500
	T&C $150	CT HEAD $750
	COAGS $100	CT C SPINE $750
	EKG $100	
	ABG: $100	
	TOX SCREEN: $250	

Case #1:

85y female with 8 hours epigastric pain.

Pain started in the early afternoon and has been constant since.

VS: BP 145/85 HR 86 T 37.1 RR 16 O2 Sat 97% RA

WORK UP LIST

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Total Spent: $

Case #1 Answer Key

History: Pain started immediately after lunch. No prior abdominal surgeries.

Additional History: Has had 1 or 2 mild episodes of similar pain in the past after eating but of much shorter duration.

Exam: On exam mild to moderate epigastric tenderness, no guarding or rebound. 3/3 items and good clock draw on Mini-Cog. O/w exam completely normal.

Rectal: negative

Pelvic: declined (but still charge the cost)

Male GU: N/A

CBC- WBC 13, otherwise WNL

Chem 7- WNL

Chem 10- WNL

LFTs- AST 65, ALT 70, alk phos 200, GGT 80

Lipase- WNL

UA- WNL

Coags- WNL

Lactate- 1.2

EKG- Normal rate and rhythm, flipped T waves V3-5

US- + gallstones, gallbladder wall thickening, + pericholecystic fluid

CXR- WNL

3way- WNL

CT Head- WNL

CT Renal- WNL, + gallstones

CT abd- + gallstones, gallbladder wall thickening, + pericholecystic fluid

MRI- + gallstones, gallbladder wall thickening, + pericholecystic fluid

Diagnosis: Cholecystitis

Case #2:

67y male with 3 days of worsening intermittent abdominal pain.

Described as diffuse abdominal pain. Seen by PCP yesterday and given Phenergan.

VS: BP 160/90   HR 102   T 37.0   RR 20   O2 sat 96%RA

WORK UP LIST

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Total Spent: $

Case #2 Answer Key

History: No similar previous episodes. Has lasted for 2-3 days with increasing intensity.

Additional history: Medical history includes high cholesterol, HTN, and atrial fibrillation.

EXAM: Abd: Mildly tender throughout, but patient in significant pain. CV: Irregularly irregular, tachycardic. Lungs: CTAB. Mini-Cog 3/3 items with good clock draw.

Rectal: weakly positive

Male GU: normal

CBC- WBC 15, otherwise WNL

Chem 7- WNL, except bicarb 15

Chem 10- WNL, except bicarb 15

LFTs- AST 30, ALT 35, alk phos 100, GGT 40

Lipase- WNL

UA- WNL

Coags- PTT WNL, PT 15, INR 1.7

Lactate 2.1

EKG- atrial fibrillation rate 105

US- + gallstones, otherwise normal

CXR- WNL

ABD 3way- a few air fluid levels, no obvious obstruction

CT Head- WNL

CT Renal- WNL

CT abd- bowel wall thickening and inflammatory stranding of colon

MRI- bowel wall thickening and inflammatory stranding of colon, thrombosis of superior mesenteric artery

Diagnosis: Mesenteric Ischemia

Case #3:

73y male with syncope.

Felt weak at church and then passed out during the sermon.

VS: BP 110/70 HR 95 T 37.0 RR 16 O2 sat 96%RA

WORK UP LIST

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Total Spent: $

Case #3 Answer Key

History: No chest pain, SOB, or seizure activity. LOC for 1-2 minutes.

Additional history: No cardiac history or history of seizures. History of diverticulitis. Has been feeling weak for last week.

Exam: Normal, including non-tender abdomen, CV normal. Normal neuro exam, including 3/3 item recall on Mini-Cog with good clock draw. No evidence extremity injury.

Rectal: melena, strongly positive

Pelvic: N/A

Male GU: WNL

CBC- WNL, except H/H is 6/18

Chem 7- WNL

Chem 10- WNL

LFTs- WNL

Lipase- WNL

UA- WNL

Coags- WNL

EKG- normal sinus, rate 95, flipped T waves V3-5

US- WNL

CXR- WNL

3way- WNL

CT Head- WNL

CT Renal- WNL

CT abd- + diverticulosis

MRI- + diverticulosis

Diagnosis: GI Bleed

Case #4

82y female presents with left wrist pain after falling at home.

She reports that she tripped over carpet and fell forward onto to her left hand

VS: BP 150/90 HR 93 T 36.4 RR 20 O2 sat 96%RA

Work up list

1.
2.
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Total Spent: $

Case #4 Answer Key

History: She was at home, walking to the bathroom, when she tripped on the carpet falling forward onto her left hand. Has had left wrist pain since then, no other pain. No LOC. No neck pain.

Additional history: She has h/o HTN, DM, renal insufficiency, osteoporosis. Takes ace inhibitor, metformin, calcium/vit D supplements. Patient remembers incident clearly and denies hitting her head.

Exam- Left wrist with swelling and deformity present, NV intact. No midline c/t/l spine ttp. Cardiac/pulm/abd exam WNL. Normal neuro exam, including 3/3 item recall on Mini-Cog with good clock draw. Normal hip ROM. No evidence trauma to head.

Rectal: Negative

Pelvic: NA

CBC: WNL

Chem 7- Cr 1.8, glucose 210, otherwise WNL

Chem 10- WNL

LFTs/lipase- WNL

UA- 1+ LE, 6 WBCs, o/w negative

Coags- WNL

EKG- rate 72, normal sinus, no st-t wave changes

CXR- WNL

Head CT/c-spine CT- no acute abnormality

Left wrist x-ray: + distal radius fracture

Diagnosis: Fall with +Colles' fracture

Case f/u:

Ortho comes by and reduces/splints extremity, states pt can follow-up with them in clinic and asks you to take care of pain control. What do you send the patient home with?

Case #5

74y female presents with confusion from local assisted living facility.

VS: BP 150/90   HR 97   T 37.8   RR 26 O2 sat 93%RA

Work up list

1.
2.
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10.

Total Spent: $

Case #5 Answer Key

History: Patient found to be confused today. Seems to be talking to her husband who has passed away. She is easily distractible.

Additional history: She has h/o renal insufficiency, osteoarthritis.

Information from skilled nursing facility: Patient has been complaining of increased knee pain recently. Taking increasing amounts of over the counter aspirin to treat this pain. Has had 2 episodes vomiting today. At baseline patient has mild short-term memory loss but is mostly self sufficient and not easily distracted.

Exam- Confused appearing patient. Occasionally speaks to someone named George who is not present. Difficulty focusing on you in the conversation. No evidence trauma. CV: RRR; Lungs: CTA B; Abd: Soft, mild epigastric tenderness; Ext: mild right knee tenderness and swelling without evidence injury

Rectal: Negative

Pelvic: NA

CBC: WBC 12, otherwise WNL

Chem 7- Na 144, K 4.5, Cl 100, Bicarb 14, Cr 3.0, BUN 50, Glucose 130

LFTs/lipase- WNL

UA- WNL

Coags- WNL

Lactate: 2.7

ABG: 7.25/ 28/ 80

Tox Screen: ASA 50 mg/ dl, otherwise WNL

EKG- NSR, normal intervals, no evidence acute ischemia

CXR- Mild bilateral pulmonary edema

Head CT - no acute abnormality

Diagnosis: Chronic Salicylate Toxicity

Create Your Own Case

CC:

VS: BP HR T RR O2 sat

History:

Additional history:

Information from skilled nursing facility:

Exam:

Rectal:

Pelvic:

CBC:

Chem 7:

LFTs/lipase:

UA:

Coags:

Lactate:

ABG:

Tox Screen:

EKG:

CXR:

Head CT:

Diagnosis: