

## EMERGENCY-System Wise 1700-by Sush and Team. 2016

Susmita, Asad, Manu, Saima, Zohaib, Savia, Shanu, Mona, Manisha, Sitara, Samreena, Sami and Komal

**Dear Plabber,**

- This first ever System Wise 1700 document was created thanks to 3 months of daily hard work by the PLAB Skype group 'Unity' which was brought together by Dr Susmita Chowdhury.
- Please ignore the old versions posted by my new skype member Murtaza as he did so without permission.

*The team members were:*

- 📖 **Susmita** (Lead/most ignorant as she is working full time in public health for 13 years)
- 📖 **Asad** (Invaluable in IT and all types of support/the heart of the group)
- 📖 **Manu** (Volunteered to solve more questions/pathologist/amazing genuine person)
- 📖 **Saima** (Most concise clear notes/ photographic memory)
- 📖 **Zohaib** (Great research/a surgeon)
- 📖 **Savia** (Great research/multi-tasker with two little ones)
- 📖 **Shanu** (Very helpful after her March exam for those appearing in June)
- 📖 **Mona** (Great contributor in discussions)
- 📖 **Manisha** (Gyne/great discussion contributor)
- 📖 **Sitara** (Good discussion contributor)
- 📖 **Samreena** (Stayed a shorter time but great)
- 📖 **Sami** (Contributed the most early on but too brilliant for the group/still great friends)
- 📖 **Komal** (Knowledgeable sweet supportive girl)

- The main purpose was to break down the 1700 Q Bank System wise.
- We did our own reliable research for the options (OHCM/Patient info etc.) and concluded these keys below on skype. This can save you 100s of hours of research. But I suggest you also do your own.
- 90% of the document consists of Unity research. We also added information from other circulating documents and they are referenced as Dr Khalid/Dr Rabia (and her Team).
- However, several keys may be 'incorrect' and so please use your own judgment as we take no responsibility. I suggest cross checking with Dr Khalid's latest keys (a few of which are still debatable). Finally decide on your own key.
- Sorry if some members failed to make their answers thorough. The highlights are mostly as per what the team members wanted to highlight. Blank tables to be ignored.
- Note that some 1700 Questions are *missing* from here (when members did not do their share). Questions may not be in order due to merging of documents and there is excess information than required. Read as much as needed.
- This has been circulated by our team as a generous contribution to the Plabbers' success and must not be 'sold'.

***Good luck and best wishes: Sush and Team***

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<b>Q: 83</b>	<p>A 34yo pt presents with 50% partial thickness burns. What should be the most appropriate management?</p> <p>a. IV fluids calculated from the time of hospital arrival  b. IV fluids calculated from the time of burn  c. No IVF  d. IV dextrose stat  e. Burns ointment</p>
	m
<b>Clincher(s)</b>	
A	
B	<p>Resuscitation fluids required in the first 24 hours from the time of injury. For adults: 3 ml (in partial thickness burn) of Hartmann's solution/kg body weight/% total.</p>
C	
D	
E	
<b>KEY</b>	<b>B</b>
Additional Information	<p>can be used in adults (see OHCS p236). Secure them well: they are literally lifelines. Use a <i>burns calculator</i> flow chart or a formula, eg: <i>Parkland formula</i> (popular): <math>4 \times \text{weight (kg)} \times \% \text{ burn} = \text{mL Hartmann's solution in 24h}</math>, half given in 1<sup>st</sup> 8h. Replace fluid from the time of burn, not from the time first seen in hospital. <i>Formulae are only guides</i>: adjust IVI according to clinical response and urine output; aim for 0.5mL/kg/h (1mL/kg/h in children), ~50% more in electrical burns and inhalation injury. Monitor <math>T^{\circ}</math> (core and surface); catheterize the bladder. Beware of over-resuscitation ('fluid creep') which can lead to complications such as abdominal compartment syndrome.</p> <p><b>Treatment</b> 'Cool the burn, warm the patient'. Do <i>not</i> apply cold water to extensive burns for long periods: this may intensify shock. Take care with circumferential full thickness burns of the limbs as compartment syndrome may develop rapidly particularly after fluid resuscitation. Decompress (escharotomy and fasciotomy) as needed. If transferring to a burns unit, do not burst blisters or apply any special creams as this can hinder assessment. Simple saline gauze or paraffin gauze is suitable; cling film is useful as a temporary measure and relieves pain. Titrate morphine IV for good analgesia. Ensure tetanus immunity. Antibiotic prophylaxis is not routinely used.</p>
<b>Reference</b>	OHCM 858
Dr Khalid/Rabia	<p>Body surface area.</p> <p>Half of this calculated volume is given in the first 8 hours and the other half is given over the following 16 hours.</p>

<b>Q: 97</b>	<p>A young man is brought to the ED after a RTA. His GCS on initial evaluation is 6. What is the most appropriate next step?</p> <p>a. CT  b. MRI  c. IV fluids</p>
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	d. Skull XR e. Secure airway
<b>Clincher(s)</b>	<b>RTA GCS = 6</b>
A	
B	
C	
D	
E	Follow ABC in RTA (Trauma)
<b>KEY</b>	<b>E</b>
Additional Information	<p><b>EMERGENCY TRAUMA ASSESSMENT</b> <b>"ABCDEFghi"</b></p> <p><b>PRIMARY SURVEY</b></p> <p><b>A AIRWAY</b> Keep the airway open to allow the body to take in oxygen and expel carbon dioxide. Use the head-tilt chin-lift technique to open the airway. Check for and remove obstructions.</p> <p><b>B BREATHING</b> Look at the chest and observe the rising and falling for normal respiration. Listen for air movement. Feel for air coming through the mouth or nose. Abnormal or no breathing? Initiate CPR with 2 breaths.</p> <p><b>C CIRCULATION</b> Oxygen-rich blood cannot be circulated without breathing. Hence, it's unnecessary to check for pulse to determine whether CPR is needed; commence immediately if no breathing is detected.</p> <p><b>SECONDARY SURVEY</b></p> <p><b>D DISABILITY</b> Check the patient's neurological status and for obvious deformities or disabilities.</p> <p><b>E EXPOSE &amp; EXAMINE</b> Remove clothing as necessary to properly assess patient; be sure to keep the patient warm.</p> <p><b>F FULL SET OF VITAL SIGNS</b> Note any changes in the following signs: pulse (carotid, brachial, radial), pupils, breathing, level of consciousness, blood pressure, and skin color and temperature.</p> <p><b>G GIVE COMFORT MEASURES</b> Continue to rest and reassure. Provide comfort measures and prevent further injury.</p> <p><b>H HISTORY AND HEAD-TO-TOE ASSESSMENT</b> Use the mnemonic SAMPLE to obtain health history and do a head-to-toe assessment after.</p> <p><b>I INSPECT POSTERIOR SURFACE</b> Inspect posterior surface area for wounds, deformities, discolorations, etc.</p>
<b>Reference</b>	
Dr Khalid/Rabia	<p>Ans. The key is E. Secure airway.</p> <p>In a case of Road Traffic Accident. or any trauma, management starts with A- airway (includes cervical immobility), B- (breathing), C (circulation) , D (disability) . ETT SHOULD BE CONSIDERED IN ALL PATIENTS WITH GCS BELOW</p>

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<b>Q: 115</b>	A 4yo boy with a febrile convulsion lasting eight minutes has been given IV lorazepam to control them. What is the single most likely serious side effect? a. Amnesia b. Anaphylactic shock c. Apnea d. Bronchospasm e. Cardiac arrhythmia
<b>Clincher(s)</b>	<b>Lorazepam IV</b>
A	One of the side effects
B	
C	Most serious
D	
E	
<b>KEY</b>	<b>C</b>
<b>Additional Information</b>	<p><b>General</b> The most commonly reported side effects were sedation, hypotension, somnolence, and respiratory failure.<sup>[Ref]</sup></p> <p><b>Nervous system</b> Very common (10% or more): Sedation (15.9%) Common (1% to 10%): Nervousness, abnormal coordination, dysarthria, memory disturbance, somnolence, dizziness Uncommon (0.1% to 1%): Coma Frequency not reported: Headache, hemiparesis, hypotonia, slurred speech, tremor, vertigo, taste loss, migraine, paresthesia, anterograde amnesia, unsteadiness, extrapyramidal symptoms Postmarketing reports: Acute brain syndrome, brain edema, convulsion, neuroleptic malignant syndrome<sup>[Ref]</sup></p> <p><b>Psychiatric</b> Common (1% to 10%): Depression, emotional lability, confusion Frequency not reported: Hallucinations, insomnia, psychosis, excitability, irritability, aggressive behavior, agitation, hostility, anxiety, vivid dreams, hyperactivity, organic disinhibition, depersonalization, apathy, excitement, feeling mad, illusion, nightmares, sleep disorders, suicide ideation, rage<sup>[Ref]</sup></p> <p><b>Respiratory</b> Rare (less than 0.1%): Worsening of sleep apnea, worsening of obstructive pulmonary disease Frequency not reported: Respiratory depression, asthmatic attack, dyspnea, pneumonia Postmarketing reports: Pneumothorax<sup>[Ref]</sup></p>
<b>Reference</b>	
Dr Khalid/Rabia	Due to respiratory depression caused by benzodiazepines. They can also cause amnesia but it won't be in acute setting.

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<b>Q: 117</b>	<p>A 12yo girl when playing in the garden accidentally stepped on a hive and was bitten several times. She has numerous wheals on her body and complains of severe itching. What is the single most appropriate management?</p> <p>a. Oral antihistamine b. IV antihistamine c. IM adrenaline d. Oral ciprofloxacin e. Reassurance</p>
<b>Clincher(s)</b>	<b>Bitten several times, severe itching and numerous wheals on body</b>
A	Correct answer
B	
C	Give if anaphylaxis
D	
E	
<b>KEY</b>	<b>A</b>
Additional Information	
<b>Reference</b>	
Dr Khalid/Rabia	<p>Ans. The given key is C. IM adrenaline which is a wrong key. The correct answer is A. Oral antihistamine.</p> <p>Followings are the indications of adrenaline in anaphylaxis:</p> <ol style="list-style-type: none"> <li>1. Horseness of voice</li> <li>2. Wheeze</li> <li>3. Shortness of breath</li> <li>4. Shock</li> <li>5. Stridor</li> <li>6. Swelling of the tongue and cheek</li> <li>7. Facial swelling</li> </ol> <p><b>Consider anaphylaxis</b> when there is compatible history of rapid-onset severe allergic-type reaction with respiratory difficulty and/or hypotension, <b>especially if there are skin changes present</b> and the treatment of anaphylaxis is IM adrenaline not anti histamine</p> <p>Adrenaline can be repeated after 5mins.</p> <p>And since she is bitten by bee several times it a risk factor for anaphylaxis.</p>

<b>Q: 123</b>	<p>A man with anterior resection and end to end anastomosis done complains of severe pain in the chest and abdominal distension. What is the most appropriate inv likely to review the cause this deterioration?</p> <p>a. XR abdomen b. Exploratory laparoscopy</p>
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	c. CT d. US e. Laparotomy
	Controversial question
<b>Clincher(s)</b>	
A	
B	
C	Correct answer
D	
E	
<b>KEY</b>	<b>C</b>
Additional Information	<p><b>Missed or delayed diagnosis of intra-abdominal organ injury</b></p> <p>Injuries to the spleen, liver, and abdominal vasculature. Significant intra-abdominal haemorrhage and haemodynamic instability may result from abdominal vascular, splenic, and hepatic injuries. Thus, if these injuries are missed, the patient may suffer the consequences of haemorrhagic shock and uncontrolled intra-abdominal bleeding. A focused assessment with sonography in trauma (FAST) examination and abdominal CT scan with contrast have important roles in diagnosing these injuries and should be initiated promptly when these injuries are suspected. (BMJ)</p> <p>a. <b>Anastomotic leak:</b> usually after bowel resection. Any physiological change after bowel resection is always anastomotic leak until proven otherwise. Does not immediately occur after the operation. Develops after patient has started eating and drinking, usually on day 3-7 post op.</p> <p><b>Investigation:</b> CT abdomen. <b>Rx:</b> Antibiotics broad spectrum IV immediately (cefuroxime + metronidazole), Laparotomy</p>
<b>Reference</b>	<a href="http://bestpractice.bmj.com/best-practice/monograph/1187/emergencies.html">http://bestpractice.bmj.com/best-practice/monograph/1187/emergencies.html</a>
Dr Khalid/Rabia	Ans. The key is E. Laparotomy. [diagnostic and therapeutic]. ?

<b>Q: 125</b>	<p>A 35yo male builder presented with sudden onset of severe abdominal pain. He was previously fit and well other than taking ibuprofen for a long term knee injury. On examination he is in severe pain, pulse=110bpm, BP=110/70mmHg and has a rigid abdomen. What is the most likely dx?</p> <p>a. Biliary peritonitis b. Ischemic colon c. Pancreatic necrosis d. Perforated diverticulum e. Perforated peptic ulcer</p>



Clincher(s)	Abdominal pain, Ibuprofen medication for long term knee injury.
A	
B	
C	
D	
E	NSAID induced ulcer
<b>KEY</b>	<b>E</b>
Additional Information	<p><b>NSAID-associated ulcers</b></p> <p>Gastro-intestinal bleeding and ulceration can occur with NSAID use (section 10.1.1). The risk of serious upper gastro-intestinal side-effects varies between individual NSAIDs (see NSAIDs and Gastro-intestinal Events, p. 704). Whenever possible, the NSAID should be <b>withdrawn</b> if an ulcer occurs.</p> <p><b>Box 1: Areas of the gastrointestinal tract that may be damaged by NSAIDs</b></p> <p>Oesophagus: oesophagitis, ulceration, stricture</p> <p>Stomach: ulcers, erosions</p> <p>Duodenum: ulcers, erosions</p> <p>Small intestine: ulcers, erosions, protein loss, strictures</p> <p>Colon: non-specific colitis, exacerbation of ulcerative colitis and Crohn's disease</p>
<b>Reference</b>	<a href="http://pmj.bmj.com/content/77/904/82.full">http://pmj.bmj.com/content/77/904/82.full</a> BNF 68
Dr Khalid/Rabia	<p>Ans. The key is E. Perforated peptic ulcer. [NSAIDs induced perforation]. Peritonitis (Perforation of peptic ulcer/duodenal ulcer, diverticulum, appendix, bowel, or gallbladder) <b>Signs:</b> prostration, shock, lying still, +ve cough test tenderness (<math>\pm</math> rebound/percussion pain), board-like abdominal rigidity, guarding and no bowel sounds. Erect <b>CXR</b> may show gas under the diaphragm. NB: acute pancreatitis causes these signs, but does not require a laparotomy so don't be caught out and always check serum amylase</p>

<b>Q: 126</b>	<p>A woman 5 days post-op for bilateral salphingo-oopherectomy and abdominal hysterectomy has developed abdominal pain and vomiting a/w abdominal distension and can't pass gas. No bowel sounds heard, although well hydrated. What is the most appropriate next step?</p> <p>a. XR abdomen</p> <p>b. Exploratory laparoscopy</p>
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	c. CT d. USG e. Barium enema
<b>Clincher(s)</b>	
A	The patient has classical features of intestinal obstruction, and since no bowel sounds heard and the patient is in the postoperative period, paralytic ileus is the most likely cause. Abdominal X-ray can reveal air in the colon and rectum in paralytic ileus, and exclude small bowel obstruction or bowel perforation which are the main ddx.
B	
C	
D	
E	
<b>KEY</b>	<b>A</b>
Additional Information	
<b>Reference</b>	
Dr Khalid/Rabia	<p>Ans. 1. The key is A. X-ray abdomen.</p> <p>Ans. 2. The diagnosis is paralytic ileus.</p> <p>Ans. 3. Causes of paralytic ileus: i) electrolyte imbalance ii) gastroenteritis iii) appendicitis iv) pancreatitis v) surgical complications and vi) certain drugs.</p> <p>Ans. 4. Management of paralytic ileus: i) nil by mouth ii) nasogastric suction to alleviate the distension and remove the obstruction.</p> <p>Bowel sounds are absent in paralytic ileus But bowel sounds are exaggerated in mechanical obstruction.</p> <p>Ileus and incomplete small bowel obstruction can be conservatively managed while strangulation large bowel obstruction requires surgery.</p> <p>CT can confirm the level of obstruction.</p>

<b>Q: 136</b>	<p>A butcher stabbed accidentally his groin. He bled so much that the towel was soaked in blood and BP=80/50mmHg, pulse=130bpm. What % of circulatory blood did he lose?</p> <p>a. &lt;15%</p> <p>b. 15-30%</p> <p>c. 30-40%</p> <p>d. 40-50%</p> <p>e. &gt;50%</p>
<b>Clincher(s)</b>	
A	



B																																				
C	Correct answer																																			
D																																				
E																																				
KEY	C																																			
Additional Information	<div>Initial Assessment</div> <ul style="list-style-type: none"><li>• Always remember to assess A,B,C's</li><li>• Assess degree of hypovolemic shock</li></ul> <table><tr><th></th><th>Class I</th><th>Class II</th><th>Class III</th><th>Class IV</th></tr><tr><td>Blood loss (mL)</td><td>750</td><td>750-1500</td><td>1500-2000</td><td>&gt;2000</td></tr><tr><td>Blood volume loss (%)</td><td>&lt; 15%</td><td>15-30%</td><td>30-40%</td><td>&gt;40%</td></tr><tr><td>Heart rate</td><td>&lt;100</td><td>&gt;100</td><td>&gt;120</td><td>&gt;140</td></tr><tr><td>SBP</td><td>No change</td><td>Orthostatic change</td><td>Reduced</td><td>Very low, supine</td></tr><tr><td>Urine output (mL/hr)</td><td>&gt;30</td><td>20-30</td><td>10-20</td><td>&lt;10</td></tr><tr><td>Mental status</td><td>Alert</td><td>Anxious</td><td>Aggressive/drowsy</td><td>Confused/unconscious</td></tr></table>		Class I	Class II	Class III	Class IV	Blood loss (mL)	750	750-1500	1500-2000	>2000	Blood volume loss (%)	< 15%	15-30%	30-40%	>40%	Heart rate	<100	>100	>120	>140	SBP	No change	Orthostatic change	Reduced	Very low, supine	Urine output (mL/hr)	>30	20-30	10-20	<10	Mental status	Alert	Anxious	Aggressive/drowsy	Confused/unconscious
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Dr Khalid/Rabia	<p>Ans. 1. The key is C. 30-40%</p> <p>Ans. 2. Hypovolemic shock Classification:</p> <ol style="list-style-type: none"><li>Class 1 up to 15% of blood volume lost: pulse &lt;100; systolic BP normal; pulse pressure normal; Respiratory rate 14-20; urine output greater than 30 ml/hour.</li><li>Class 2 15%-30% blood volume lost: pulse 100-120; systolic blood pressure normal; pulse pressure decreased; respiratory rate 20-30; urine output 20-30 ml/hour.</li><li>Class 3 30%-40% blood volume lost: pulse 120-140; systolic BP decreased; pulse pressure decreased, respiratory rate 30-40; urine output 5-15 ml/hr</li><li>Class 4, blood loss of greater than 40%: pulse rate &gt;140; systolic BP decreased; pulse pressure decreased' respiratory rate &gt;35; urine output negligible.</li></ol>																																			

Q:898	A 67yo man presents to the ED with pain in his left groin. He suddenly collapses and his is not able to move or lift his leg. He is on alendronate. What is the dx?
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	a. Fx of neck of femur b. Post hip dislocation c. Fx of shaft of femur d. Pelvic base fx e. Peripheral vascular disease
Clincher(s)	
A	Fx of neck of femur
B	Post hip dislocation
C	Fx of shaft of femur
D	Pelvic base fx
E	Peripheral vascular disease
KEY	A
Additional Information	<p><u>Although osteoporosis commonly affects the hip and lumbar vertebrae, it may also be found at other sites such as the radius, tibia and ribs(5). One consequence of reduced BMD is that osteoporosis is strongly associated with low trauma fracture. Indeed, upto 51% of fractures in women and 24% of those in men are attributable to osteoporosis</u></p> <p>In addition to the economic consequences, hip fracture in particular is associated with profound disability and psychosocial sequelae. For example, 50% of hip fracture patients lose the ability to walk without assistance and 25% require domiciliary care thereafter. Furthermore, the mortality rate over the 6 months following hip fracture may be as high as 30%</p> <p>Although the hip joint is only surpassed in flexibility by the glenohumeral (shoulder) joint, some range of mobility has been sacrificed in favour of further stability (13). This is probably because the weight of the upper body is entirely supported by this joint on standing (12). One consequence of this stability is that the hip joint of a healthy patient should not fracture in the absence of high energy trauma. Indeed, the femoral head is classically fractured only in high impact road traffic accidents in which the dash board strikes the knee to rupture the joint capsule (14).</p> <p>However, the femoral head is supported by a relatively thin structure known as the femoral neck which is more prone to fracture than the joint itself is to dislocation (13). The femoral neck is particularly vulnerable in patients suffering from bone disorders such as Paget's disease, osteomalacia, osteopetrosis, osteogenesis imperfecta and metabolic bone disease. Femoral neck fractures are also frequently associated with primary tumours of the bone, cancer metastases and infection of the bone (15). However, the majority of patients presenting with femoral neck fractures are those with osteoporosis (16). Although osteoporosis may be caused by multiple factors, all of these are thought to act by subverting the normal physiology of healthy bone.</p>
Reference	<a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2322920/pdf/mjm11_1p51.pdf">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2322920/pdf/mjm11_1p51.pdf</a>

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Dr Khalid/Rabia	
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Q:899	A young male met with a RTA and is suspected to have a femur fx. His BP is 90/60mmHg. What is the next immediate action? a. XR b. IV fluids c. Put leg splint d. Send bloods for inv e. US
Clincher(s)	
A	XR
B	IV fluids- ATLS
C	Put leg splint
D	Send bloods for inv
E	US
KEY	C (IV fluid will be given if diastolic pressure is below 30)
Additional Information	<u>MANAGING FRACTURES-7 A'S</u>  <u>735 OHCS</u> <u>ATLS CORRECT SHOCK, BLOOD IF &gt; 1.5 L LOST.</u> <u>Assesment</u> <u>Antisepsis</u> <u>Alignment</u> <u>Anti tetanus</u> <u>Antibiotics- CEFTRIAXONE WITH/WITHOUT METRONIDAZOLE</u> <u>Analgesia- INTRAVENOUS OPIATE ANALGESIA</u>
Reference	
Dr Khalid/Rabia	

Q:901	A 27yo pt met with a RTA. While the NGT is passing, bowel sounds are heard in the chest. CXR shows NGT curled. What is the dx? a. Diaphragm rupture b. Aortic rupture c. Splenic rupture d. Bowel rupture e. Liver rupture
Clincher(s)	
A	Diaphragm rupture
B	Aortic rupture
C	Splenic rupture
D	Bowel rupture
E	Liver rupture

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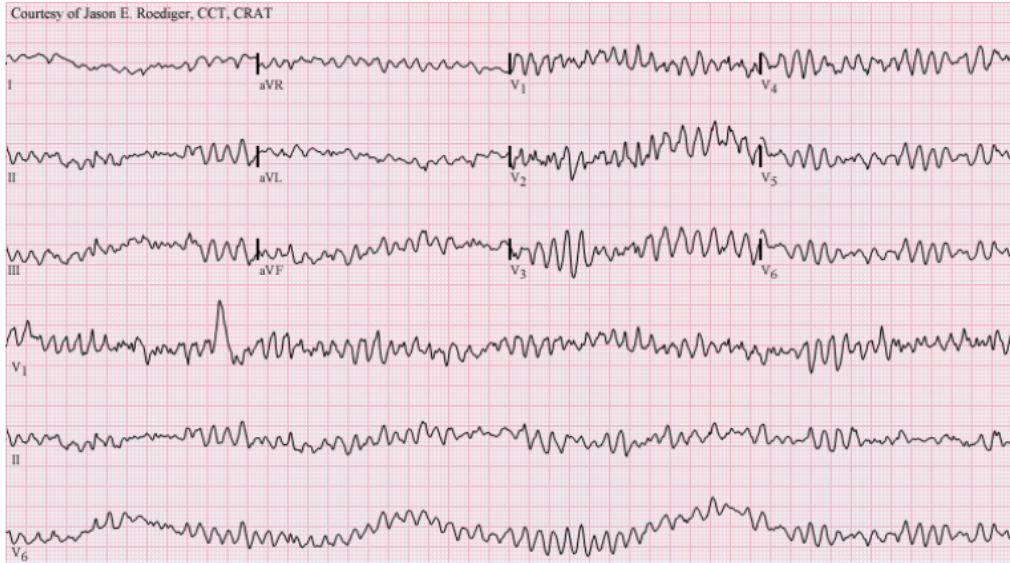
KEY	A
Additional Information	
Reference	
Dr Khalid/Rabia	

Q:907	<p>A young man was knocked down during a fight in the waiting room of the ED. He is now unconscious and unresponsive. What is the 1st thing you would do?</p> <p>a. Turn pt and put in recovery position b. Put airway c. Endotracheal intubation d. Assess GCS e. Start CPR</p>
Clincher(s)	
A	Turn pt and put in recovery position
B	Put airway
C	Endotracheal intubation
D	Assess GCS
E	Start CPR
KEY	B
Additional Information	<p><u>BASIC LIFE SUPPORT- SAFE 721 OHCS</u> <u>SHOUT FOR HELP</u> <u>APPROACH WITH CARE</u> <u>FREE PT FROM DANGER</u> <u>EVALUATE ABC</u> <u>ESTABLISH RESPONSIVENESS</u> <u>AIRWAY BREATHING- 30:2 CHEST COMPRESSIONS</u> <u>For 100-120 MIN</u></p> <p><u>UNRESPONSIVE- SHOUT FOR HELP- OPEN AIRWAY- NOT BREATHING</u> <u>NORMALLY – CALL 999- 30 CHEST COMPRESSIONS- 2 RESCUE BREATHS.</u></p> <p><u>HEAD TILT, CHIN LIFT, NON RESPONSIVE- TURN ON BACK</u> <u>LOOK LISTEN FEEL- IF BREATHING PLACE IN RECOVERY POSITION AND GO FOR HELP</u> <u>IF ALONE CALL HELP /EMGY SERVICES</u> <u>COMPRESSION @100 /MIN</u></p>
Reference	
Dr Khalid/Rabia	

Q:919	A 63yo man has been brought to the hosp after collapsing during a wedding.
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	His ECG is below. What is the most likely dx? a. VT b. A-fib c. VF d. A-flutter e. SVT
Clincher(s)	
A	VT
B	A-fib
C	VF
D	A-flutter
E	SVT
KEY	C
Additional Information	<p>Courtesy of Jason E. Roediger, CCT, CRAT</p> 
Reference	
Dr Khalid/Rabia	

Q:939	<p>A tall rugby player was hit in the chest by a player of the opponent team. He developed breathlessness and his face went blue and purple. You have been called to look at him, how will you manage him?</p> <p>a. Insert a needle in the 2nd ICS in the mid-clavicular line b. Insert a needle in the 5th ICS in the mid-axillary line c. Intubate the pt d. Start CPR e. Give oxygen</p>
Clincher(s)	
A	a. Insert a needle in the 2nd ICS in the mid-clavicular line
B	Insert a needle in the 5th ICS in the mid-axillary line
C	. Intubate the pt
D	. Start CPR

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E	Give oxygen
KEY	A (AS O2 won't help him)
Additional Information	<u>724 OHCS</u>
Reference	
Dr Khalid/Rabia	



Q:944	A 28yo drug user presents to ED collapsed and anuria. His serum K+=7.5mmol/l. CXR shows early pulmonary edema. What is the next appropriate management for this pt? a. Urgent hemodialysis b. IV calcium gluconate c. IV insulin + dextrose d. Furosemide e. IV 0.9% NS
Clincher(s)	
A	Urgent hemodialysis
B	IV calcium gluconate
C	IV insulin + dextrose
D	Furosemide
E	IV 0.9% NS
KEY	B
Additional Information	<u>176 OHCS</u>
Reference	
Dr Khalid/Rabia	

Q:964	A 52yo man known DM presents to ED with sudden onset of pain in the left loin and hematuria. Inv: 8mm stone in left lower ureter. Nifedipine with steroids was prescribed as initial tx with supportive therapy. He returned complaining of worsening pain, vomiting with passing of 2 stones. Renal function tests indicate impending ARF. How will you manage this pt? a. Continue same tx b. Start alpha blocker c. ESWL d. Percutaneous nephrolithotomy e. Percutaneous nephrostomy f. Open surgery
Clincher(s)	
A	Continue same tx
B	. Start alpha blocker
C	ESWL



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D	Percutaneous nephrolithotomy
E	Percutaneous nephrostomy
F	Open surgery
KEY	E
Additional Information	<p><i>Initially:</i> Analgesia, eg <i>diclofenac</i> 75mg IV/IM, or 100mg PR. <b>225</b> (If CI: opioids) + IV fl uids if unable to tolerate PO; antibiotics (eg <i>cefuroxime</i> 1.5g/8h IV, or <i>gentamicin</i>) if infection. <i>Stones &lt;5mm in lower ureter:</i> ~90–95% pass spontaneously. 9fl uid intake.</p> <p><i>Stones &gt;5mm/pain not resolving:</i> Medical expulsive therapy: <i>nifedipine</i> 10mg/8h PO <b>226</b> or <math>\beta</math>-blockers (<i>tamulosin</i> 0.4mg/d <b>227</b>) promote expulsion and reduce analgesia requirements:<b>228</b>  start at presentation. <b>229</b> Most pass within 48h (&gt;80% after ~30d). If not, try extracorporeal shockwave lithotripsy (ESWL) (if &lt;1cm), or ureteroscopy using a basket. <b>230</b> ESWL: US waves shatter stone. SE: renal injury, may also cause 9BP and DM. <b>231</b> Percutaneous nephrolithotomy (PCNL): keyhole surgery to remove stones, when large, multiple, or complex. <b>232</b> Open surgery is rare.</p> <p> <i>Indications for urgent intervention (delay kills glom</i></p>
Reference	
Dr Khalid/Rabia	

Q:991	<p>You are the HO in the hospital and the lab report of a pt shows glucose=4mmol/l, K+=5.2mmol/l, Na+129mmol/l. what is the most appropriate management?</p> <p>a. NS 0.9%</p> <p>b. NS 0.45%</p> <p>c. NS 0.9% and insulin</p> <p>d. Insulin</p> <p>e. Dextrose</p>
Clincher(s)	
A	NS 0.9%
B	. NS 0.45%
C	NS 0.9% and insulin
D	Insulin
E	Dextrose
KEY	A
Additional	

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Information	
Reference	
Dr Khalid/Rabia	

Q:898	<p>A 67yo man presents to the ED with pain in his left groin. He suddenly collapses and his is not able to move or lift his leg. He is on alendronate. What is the dx?</p> <p>a. Fx of neck of femur b. Post hip dislocation c. Fx of shaft of femur d. Pelvic base fx e. Peripheral vascular disease</p>
Clincher(s)	
A	Fx of neck of femur
B	Post hip dislocation
C	Fx of shaft of femur
D	Pelvic base fx
E	Peripheral vascular disease
KEY	A
Additional Information	<p><u>Although osteoporosis commonly affects the hip and lumbar vertebrae, it may also be found at other sites such as the radius,tibia and ribs(5).One consequence o f reduced BMD is that osteoporosis is strongly associated with low trauma fracture.Indeed,upto51% of fractures in women and 24% of those in men are a ttributable to osteoporosis</u></p> <p>In addition to the economic consequences, hip fracture in particular is associated with profound disability and psychosocial sequelae. For example, 50% of hip fracture patients lose the ability to walk without assistance and 25% require domiciliary care thereafter. Furthermore, the mortality rate over the 6 months following hip fracture may be as high as 30%</p> <p>Although the hip joint is only surpassed in flexibility by the glenohumeral (shoulder) joint, some range of mobility has been sacrificed in favour of further stability (13). This is probably because the weight of the upper body is entirely supported by this joint on standing (12). One consequence of this stability is that the hip joint of a healthy patient should not fracture in the absence of high energy trauma. Indeed, the femoral head is classically fractured only in high impact road traffic accidents in which the dash board strikes the knee to rupture the joint capsule (14).</p> <p>However, the femoral head is supported by a relatively thin structure known as the femoral neck which is more prone to fracture than the joint itself is to</p>

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	dislocation (13). The femoral neck is particularly vulnerable in patients suffering from bone disorders such as Paget's disease, osteomalacia, osteopetrosis, osteogenesis imperfecta and metabolic bone disease. Femoral neck fractures are also frequently associated with primary tumours of the bone, cancer metastases and infection of the bone (15). However, the majority of patients presenting with femoral neck fractures are those with osteoporosis (16). Although osteoporosis may be caused by multiple factors, all of these are thought to act by subverting the normal physiology of healthy bone.
Reference	<a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2322920/pdf/mjm11_1p51.pdf">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2322920/pdf/mjm11_1p51.pdf</a>
Dr Khalid/Rabia	

Q:899	A young male met with a RTA and is suspected to have a femur fx. His BP is 90/60mmHg. What is the next immediate action? a. XR b. IV fluids c. Put leg splint d. Send bloods for inv e. US
Clincher(s)	
A	XR
B	. IV fluids- ATLS
C	Put leg splint
D	Send bloods for inv
E	US
KEY	C
Additional Information	<u>MANAGING FRACTURES-7 A'S</u>  <u>735 OHCS</u> <u>ATLS CORRECT SHOCK, BLOOD IF &gt; 1.5 L LOST.</u> <u>Assesment</u> <u>Antisepsis</u> <u>Alignment</u> <u>Anti tetanus</u> <u>Antibiotics- CEFTRIAXONE WITH/WITHOUT METRONIDAZOLE</u> <u>Analgesia- INTRAVENOUS OPIATE ANALGESIA</u>
Reference	
Dr Khalid/Rabia	

Q:901	A 27yo pt met with a RTA. While the NGT is passing, bowel sounds are heard in the chest. CXR shows NGT curled. What is the dx? a. Diaphragm rupture
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	b. Aortic rupture c. Splenic rupture d. Bowel rupture e. Liver rupture
Clincher(s)	
A	Diaphragm rupture
B	Aortic rupture
C	Splenic rupture
D	Bowel rupture
E	Liver rupture
KEY	A
Additional Information	
Reference	
Dr Khalid/Rabia	

Q:907	A young man was knocked down during a fight in the waiting room of the ED. He is now unconscious and unresponsive. What is the 1st thing you would do? a. Turn pt and put in recovery position b. Put airway c. Endotracheal intubation d. Assess GCS e. Start CPR
Clincher(s)	
A	Turn pt and put in recovery position
B	Put airway
C	Endotracheal intubation
D	Assess GCS
E	Start CPR
KEY	B
Additional Information	<u>BASIC LIFE SUPPORT- SAFE 721 OHCS</u> <u>SHOUT FOR HELP</u> <u>APPROACH WITH CARE</u> <u>FREE PT FROM DANGER</u> <u>EVALUATE ABC</u> <u>ESTABLISH RESPONSIVENESS</u> <u>AIRWAY BREATHING- 30:2 CHEST COMPRESSIONS</u> <u>100-120 MIN</u>  <u>UNRESPONSIVE- SHOUT FOR HELP- OPEN AIRWAY- NOT BREATHING</u> <u>NORMALLY – CALL 999- 30 CHEST COMPRESSIONS- 2 RESCUE BREATHS.</u>  <u>HEAD TILT, CHIN LIFT, NON RESPONSIVE- TURN ON BACK</u>

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	<p><u>LOOK LISTEN FEEL- IF BREATHING PLACE IN RECOVERY POSITION AND GO FOR HELP</u></p> <p><u>IF ALONE CALL HELP /EMGY SERVICES</u></p> <p><u>COMPRESSION @100 /MIN</u></p>
Reference	
Dr Khalid/Rabia	

Q:919	<p>A 63yo man has been brought to the hosp after collapsing during a wedding. His ECG is below. What is the most likely dx?</p> <p>a. VT</p> <p>b. A-fib</p> <p>c. VF</p> <p>d. A-flutter</p> <p>e. SVT</p>
Clincher(s)	
A	VT
B	A-fib
C	VF
D	A-flutter
E	SVT
KEY	
Additional Information	
Reference	
Dr Khalid/Rabia	

Q:939	<p>A tall rugby player was hit in the chest by a player of the opponent team. He developed breathlessness and his face went blue and purple. You have been called to look at him, how will you manage him?</p> <p>a. Insert a needle in the 2nd ICS in the mid-clavicular line</p> <p>b. Insert a needle in the 5th ICS in the mid-axillary line</p> <p>c. Intubate the pt</p> <p>d. Start CPR</p> <p>e. Give oxygen</p>
Clincher(s)	
A	a. Insert a needle in the 2nd ICS in the mid-clavicular line
B	Insert a needle in the 5th ICS in the mid-axillary line
C	. Intubate the pt
D	. Start CPR
E	Give oxygen

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KEY	A
Additional Information	<u>724 OHCS</u>
Reference	
Dr Khalid/Rabia	



Q:944	A 28yo drug user presents to ED collapsed and anuria. His serum K+=7.5mmol/l. CXR shows early pulmonary edema. What is the next appropriate management for this pt? a. Urgent hemodialysis b. IV calcium gluconate c. IV insulin + dextrose d. Furosemide e. IV 0.9% NS
Clincher(s)	
A	Urgent hemodialysis
B	IV calcium gluconate
C	IV insulin + dextrose
D	Furosemide
E	IV 0.9% NS
KEY	E
Additional Information	<u>176 OHCS</u>
Reference	
Dr Khalid/Rabia	

Q:964	A 52yo man known DM presents to ED with sudden onset of pain in the left loin and hematuria. Inv: 8mm stone in left lower ureter. Nifedipine with steroids was prescribed as initial tx with supportive therapy. He returned complaining of worsening pain, vomiting with passing of 2 stones. Renal function tests indicate impending ARF. How will you manage this pt? a. Continue same tx b. Start alpha blocker c. ESWL d. Percutaneous nephrolithotomy e. Percutaneous nephrostomy f. Open surgery
Clincher(s)	
A	Continue same tx
B	Start alpha blocker
C	ESWL
D	Percutaneous nephrolithotomy



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E	Percutaneous nephrostomy
F	Open surgery
KEY	B
Additional Information	<p><i>Initially:</i> Analgesia, eg <i>diclofenac</i> 75mg IV/IM, or 100mg PR. <b>225</b> (If CI: opioids) + IV fluids if unable to tolerate PO; antibiotics (eg <i>cefuroxime</i> 1.5g/8h IV, or <i>gentamicin</i>) if infection. <i>Stones &lt;5mm in lower ureter:</i> ~90–95% pass spontaneously. 9fl uid intake.</p> <p><i>Stones &gt;5mm/pain not resolving:</i> Medical expulsive therapy: <i>nifedipine</i> 10mg/8h PO <b>226</b> or <math>\beta</math>-blockers (<i>tamulosin</i> 0.4mg/d <b>227</b>) promote expulsion and reduce analgesia requirements:<b>228</b>  start at presentation. <b>229</b> Most pass within 48h (&gt;80% after ~30d).</p> <p>If not, try extracorporeal shockwave lithotripsy (ESWL) (if &lt;1cm), or ureteroscopy using a basket. <b>230</b> ESWL: US waves shatter stone. SE: renal injury, may also cause 9BP and DM. <b>231</b> Percutaneous nephrolithotomy (PCNL): keyhole surgery to remove stones, when large, multiple, or complex. <b>232</b> Open surgery is rare.</p> <p> <i>Indications for urgent intervention (delay kills glom</i></p>
Reference	
Dr Khalid/Rabia	

Q:991	<p>You are the HO in the hospital and the lab report of a pt shows glucose=4mmol/l, K+=5.2mmol/l, Na+129mmol/l. what is the most appropriate management?</p> <p>a. NS 0.9%</p> <p>b. NS 0.45%</p> <p>c. NS 0.9% and insulin</p> <p>d. Insulin</p> <p>e. Dextrose</p>
Clincher(s)	
A	NS 0.9%
B	. NS 0.45%
C	NS 0.9% and insulin
D	Insulin
E	Dextrose
KEY	A
Additional Information	

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Reference	
Dr Khalid/Rabia	

<b>Q:796</b>	A 34yo man was involved in a RTA and whilst in the ambulance his GCS deteriorated and RRincreased from 30-48. What is the most appropriate management for this pt? a. IV fluid b. Needle thoracocentesis c. 100% oxygen d. Portable XR
<b>Clincher(s)</b>	
A	
B	
C	RTA case so we will follow ABC protocol.
D	
E	
<b>KEY</b>	<b>C</b>
Additional Information	
<b>Reference</b>	
Dr Khalid/Rabia	

<b>Q:801</b>	A 78yo gentleman suddenly collapsed. His HR=120bpm, BP=70/40mmHg. Exam: pulsatile mass in abdomen. What is the most appropriate dx? a. Aortic aneurysm b. Mesenteric cyst c. Umbilical hernia
<b>Clincher(s)</b>	<b>Suddenly collapsed,pulsatile abdomional mass</b>
A	Pulsatile mass in abdomen is most likely to be an aortic aneurysm.It's actually a ruptured aortic aneurysm which can be predicted by collapsed, tachycardic patient presenting with hypotension.
B	Mesentreric cysts occur rarely.Mainly due to the ectopic lymphatics in the mesentery or due to lymphatic obstruction.Present with intestinal obstruction and severe pain in abdomen.Can be diagnosed bu USG or CT.Treatment can be

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	laproscopic or laparotomy.can be diagnosed prenatally.
C	May present with pain on coughing or straining, or an ache or dragging sensation if large.
D	
E	
<b>KEY</b>	<b>A</b>
Additional Information	<p><b>ABDOMINAL AORTIC ANEURYSM:</b> An abdominal aneurysm is usually defined as an aortic diameter of 3 cm or greater. Most abdominal aortic aneurysms (AAAs) arise from below the level of the renal arteries. Ruptured AAA may present with:</p> <ul style="list-style-type: none"> <li>oPain in the abdomen, back or loin -the pain may be sudden and severe.</li> <li>oSyncope, shock or collapse:</li> <li>♣The degree of shock varies according to the site of rupture and whether it is contained -eg, rupture into th peritoneal cavity is usually dramatic, with death before reaching hospital; whereas rupture into the retroperitoneal space may be contained initially by a temporary seal forming.</li> </ul>
<b>Reference</b>	
Dr Khalid/Rabia	

<b>Q:815</b>	<p>A 24yo male was trying to move his wardrobe but it fell on his thigh. It was there for a very long time before someone was able to remove it. When he was seen in ED he had casts in his urine but no RBCs. Other inv showed hypocalcemia and high serum creatinine. What is the cause for his renal failure?</p> <ol style="list-style-type: none"> <li>a. Acetylcholine</li> <li>b. Myoglobin</li> <li>c. Myotroponin</li> <li>d. Acetyl aceta</li> </ol>
<b>Clincher(s)</b>	<b>Wardrobe fell on thigh,remained there for a long time</b>
A	
B	<p>Myoglobinuria is usually the result of rhabdomyolysis or muscle destruction. Any process that interferes with the storage or use of energy by muscle cells can lead to myoglobinuria. The release of myoglobin from muscle cells is often associated with an increase in levels of creatine kinase (CK), aldolase, lactate dehydrogenase (LDH), serum glutamic-pyruvic transaminase (SGPT), and other enzymes. When excreted into the urine, myoglobin, a monomer containing a heme molecule similar to hemoglobin, can precipitate, causing tubular obstruction and acute kidney injury.</p>
C	

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D	
E	
<b>KEY</b>	<b>B</b>
Additional Information	<b>The most common causes of myoglobinuria in adults are trauma, alcohol and drug abuse, usually in relation to muscle necrosis from prolonged immobilization and pressure by the body weight</b>
<b>Reference</b>	Emedicine.medscape
Dr Khalid/Rabia	

<b>Q:818</b>	An 8yo child swallowed 12 tablets of paracetamol 4h ago. Serum paracetamol levels when tested were at critical level. What would you do next? a. Activated charcoal b. IV N-acetylcysteine c. Gastric lavage d. Observation on
<b>Clincher(s)</b>	<b>Critical paracetamol levels</b>
A	
B	
C	
D	
E	
<b>KEY</b>	<b>B</b>
Additional Information	<b>NAC is believed to work by a number of protective mechanisms. It acts as a precursor for glutathione, promoting normal conjugation of any remaining paracetamol, and also supplies thiols that function as antioxidants. It is virtually 100% effective in preventing liver damage when given within eight hours of ingestion.[3] After eight hours, efficacy decreases sharply. The initial dose of acetylcysteine should be given as an infusion over 60 minutes. This should reduce the number of dose-related adverse effects. The infusion should be in 5% glucose, with 0.9% sodium chloride as an alternative. There are now NO specific contra-indications to acetylcysteine use. Even if there is a previously reported reaction, the benefits of treatment outweigh the risks. Specific weight-related dosing tables are available to guide the health professional.[5] Children receive the same doses and treatment as adults, but with a reduced quantity of intravenous fluid, as fluid overload is a potential risk.</b>  <b>A full treatment course comprises three consecutive doses, administered sequentially, with no break between infusions</b>
<b>Reference</b>	

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Dr Khalid/Rabia	
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<b>Q:860</b>	A 6yo child fell on his nose 2d ago. His parents have now brought him with difficulty in breathing. Exam: fever, nasal bones are straight. What is the single most likely dx? a. Nasal polyp b. Septal hematoma c. Septal abscess d. Deviated nasal septum e. Fx nose
<b>Clincher(s)</b>	
A	
B	
C	
D	
E	
<b>KEY</b>	<b>B (abscess may have longer hx and swinging fever)</b>
Additional Information	<b><u>Khalid Saifullah</u> It is septal hematoma! in a certain % (some 20-30%) of patient with septal hematoma may have fever</b>
<b>Reference</b>	
Dr Khalid/Rabia	

<b>Q:863</b>	A 4yo is brought to the ED by ambulance. His mother reports that he has been unwell with a sore throat for 8h. He is sitting on his mother's knee and is tolerating an oxygen mask but looks unwell. He has constant noisy breathing and he is drooling saliva. His temp=39C. What is the most imp dx? a. Acute asthma b. Bronchiolitis c. Croup d. Epiglottitis e. Tonsillitis
<b>Clincher(s)</b>	<b>Unwell,drooling of saliva,noisy breathing</b>
A	Asthma affects lungs,but no sore throat
B	
C	
D	
E	<b>LRTI</b>
<b>KEY</b>	<b>D</b>

Additional  
Information**Upper respiratory infection**

(URTI: OHCW p390; sore throat: p564)

† **Stridor** → Acute stridor may be a terrifying experience for children; this fear may lead to hyperventilation, which worsens symptoms. Causes: p566. The leading causes to be distinguished are viral croup, bacterial tracheitis and epiglottitis (rare in the UK since haemophilus vaccination): see box. Don't forget to consider inhaled foreign body if history doesn't seem quite right.

**Investigations:** This is a clinical diagnosis. Lateral neck x-ray (fig 1) may show an enlarged epiglottis, but this wastes time at a dangerous and critical time.

**Croup (acute laryngotracheobronchitis)** **Signs:** Stridor, barking cough, hoarseness from obstruction in the region of the larynx. **Age:** <6yrs. **Epidemics:** Autumn. **Causes:** Parainfluenza virus (1, 2, 3), respiratory syncytial virus, measles (rare). **Pathology:** Subglottic oedema, inflammation, and exudate. Croup is classified into mild/moderate and severe disease. **Mild/moderate** may be sent home if settles—eg with dexamethasone 0.15mg/kg po stat (some give more<sup>49</sup>) or prednisolone 1–2mg/kg stat. Anecdotal evidence says that warm, humid air helps, but mist tents have lost favour: they frighten, and subsequent hyperventilation worsens distress. **In hospital:** Aim for minimal interference and careful watching (T<sub>PR</sub>, S<sub>1</sub>, O<sub>2</sub>) by experienced nurses. **Watch for severe signs:** Restlessness; cyanosis (give O<sub>2</sub>); sternal retractions; rising pulse/respiratory rate; tiredness. If severe, use nebulized adrenaline<sup>50</sup> 1:1000 (5mL); if poor response, repeat, and take to ITU. Remember: volume of stridor is a factor of flow; in severe disease, stridor will be very soft. Failure to improve with steroids / nebulized adrenaline should prompt the consideration of bacterial tracheitis. This is defined by the presence of thick mucopurulent exudate and tracheal mucosal sloughing that is not cleared by coughing, and risks occluding the airway; there is often a history of a viral infection (such as croup) with an acute deterioration. Pronounced tracheal tenderness may be present.

→ **Managing suspected epiglottitis** Stay calm! Avoid examining the throat. This may precipitate obstruction. Do not bleed the patient or upset him. Summon the most experienced anaesthetist. Ask her to make the diagnosis by laryngoscopy. If epiglottitis (a cherry-red, swollen epiglottis), electively intubate before obstruction occurs. (A smaller diameter endotracheal tube than normal for that age may be needed). The cause is usually *Haemophilus influenzae* type b, treat with a 3<sup>rd</sup> generation cephalosporin (eg cefotaxime, 25–50mg/kg/8h iv). Bacterial tracheitis also benefits from early intubation, allowing pulmonary toilet and improved ventilation. Treat with cefotaxime + flucloxacillin. Hydrocortisone may be given in both, but isn't of proven value.

**Diphtheria** is caused by the toxin of *Corynebacterium diphtheriae*. It usually starts with tonsillitis ± a false membrane over the fauces. The toxin may cause polyneuritis, often starting with cranial nerves. Shock may occur from myocarditis, toxæmia, or cardiac conducting system involvement. Other signs: dysphagia; muffled voice; bronchopneumonia; airway obstruction preceded by a brassy cough (laryngotracheal diphtheria); nasal discharge with an ex-coriated upper lip (nasal diphtheria). If there is tachycardia out of proportion to fever, suspect toxin-induced myocarditis (do frequent ECGs). Motor palatal paralysis also occurs causing fluids to escape from the nose on swallowing.

**Diagnosis:** Swab culture of material below pseudomembrane; PCR.<sup>51</sup>

**Treatment:** → Diphtheria antitoxin: 10,000–30,000u IM<sup>52</sup> (any age; more if severe, see box) and erythromycin; give contacts 7 days' erythromycin syrup. <2yrs old 125mg/6h po (500mg per 6h if >8yrs) before swab results are known.

**Risk ↑ if:** Homeless/refugee; aged 3–6yrs old; in 'asocial' families. There is a now partly controlled<sup>53</sup> resurgence of diphtheria in north-west and central Russia<sup>54</sup> (relevant to travellers born before 1942, when vaccination started).

**Prevention:** Isolate until 3 –ve cultures separated by 48h. Vaccination: p151.



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	<b>Croup ... distinguished from ... bacterial tracheitis ... and ... Epiglottitis</b>		
	Common	Uncommon	Rare
	6 months – 6 years	6 months – 14 years	2–7 years
	Onset over a few days	Viral prodrome for 2-5 days, then rapid deterioration	» Sudden onset
	Stridor only when upset	Continuous stridor	» Continuous stridor
	Stridor sounds harsh	Stridor may be biphasic	» Stridor softer, snoring
	Swallows oral secretions	Swallows oral secretions	» Drooling of secretions
	Voice hoarse	Very hoarse	» Voice muffled
	Likely to be afebrile	Moderate-high fever, appear toxic	» Toxic and feverish (eg $T^{\circ} > 39^{\circ}C$ )
	Barking cough	Barking cough	Cough not prominent
<b>Reference</b>	OHCS 158-160		
Dr Khalid/Rabia			

<b>Q879</b>	60yo man brought to the ED with fx hip, he is deaf and has bilateral pedal edema. What is the single most probable dx? a. Paget's disease b. Osteoporotic fx vertebra c. Secondary d. Multiple myeloma e. Spondylosis
<b>Clincher(s)</b>	<b>Fracture hip, bilateral pedal edema</b>
A	· <a href="#">Cardiovascular disease</a> can result from severe Paget's disease (i.e. with more than 15% skeletal involvement). Arteriovenous connections can often form in the bone, and so the heart has to work harder (pump more blood) to ensure adequate oxygen supply to the tissues. This increase in cardiac output can lead to calcification of the aortic valve, and the resulting aortic stenosis causes left ventricular hypertrophy and eventually high-output congestive failure.
B	
C	
D	
E	
<b>KEY</b>	<b>A</b>
Additional Information	

	<p><b>Metabolic bone diseases: Paget's disease of bone</b></p> <p>Also called <i>osteitis deformans</i>, there is increased bone turnover associated with increased numbers of osteoblasts and osteoclasts with resultant remodelling, bone enlargement, deformity, and weakness. Rare in the under-40s. Incidence rises with age (3% over 55yrs old). Commoner in temperate climates, and in Anglo-Saxons.</p> <p><b>Clinical features</b> Asymptomatic in ~70%. Deep, boring pain, and bony deformity and enlargement—typically of the pelvis, lumbar spine, skull, femur, and tibia (classically a bowed sabre tibia; fig 3). <b>Complications</b> include pathological fractures, osteoarthritis, <math>\uparrow\text{Ca}^{2+}</math>, nerve compression due to bone overgrowth (eg deafness, root compression), high-output CHF (if &gt;40% of skeleton involved) and osteosarcoma (&lt;1% of those affected for &gt;10yrs—suspect if sudden onset or worsening of bone pain).<sup>20</sup></p> <p><b>Radiology x-ray</b> Localized enlargement of bone. Patchy cortical thickening with sclerosis, osteolysis, and deformity (eg <i>osteoporosis circumscripta</i> of the skull). Affinity for axial skeleton, long bones, and skull. Bone scan may reveal 'hot spots'.</p> <p><b>Blood chemistry</b> <math>\text{Ca}^{2+}</math> and <math>\text{PO}_4^{3-}</math> normal; alk phos markedly raised.</p> <p><b>Treatment</b> If analgesia fails, alendronate may be tried to reduce pain and/or deformity. It is more effective than etidronate or calcitonin, and as effective as IV pamidronate. Follow expert advice.</p>
<b>Reference</b>	OHCM
Dr Khalid/Rabia	

<b>Q.884</b>	<p>A 24yo man has been found unconscious in an alleyway with a RR=6bpm and HR=60 bpm. His pupils are constricted. What is the best tx?</p> <p>a. Methadone b. Naloxone c. Naltrexone d. Thiamine e. Glucose</p>
<b>Clincher(s)</b>	signs of respiratory depression, constricted (pinpoint) pupils
A	
B	Antidot for opiate toxicity
C	
D	
E	
<b>KEY</b>	<b>B</b>
<b>Additional Information</b>	<p><b>Opiates</b> (Many analgesics contain opiates.) Give naloxone, eg 0.4-2mg IV; repeat every 2min until breathing is adequate (it has a short <math>t_{1/2}</math>, so it may need to be given often or IM; max ~10mg). Naloxone may precipitate features of opiate withdrawal—diarrhoea and cramps, which will normally respond to diphenoxylate and atropine (Lomotil®—eg 2 tablets/6h PO). Sedate as needed (see p11). High-dose opiate misusers may need methadone (eg 10-30mg/12h PO) to combat withdrawal. Register opiate addiction (OHCS p362), and refer for help.</p>
<b>Reference</b>	OHCM 854

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Dr Khalid/Rabia	
<b>Q: 343</b>	<p>A 6wk child is very sick-looking. Bloods: Na+=124, K+=2.8. Dehydrated. What would you choose to resuscitate?</p> <p>a. 0.18% NS + 4% dextrose + 20mmol KCl  b. 0.9% NS  c. 0.45% NS  d. 0.45% NS + 5% dextrose  e. 0.45% NS + 5% dextrose + 20 mmol KCl</p>
<b>Clincher(s)</b>	
A	
B	
C	
D	
E	
<b>KEY</b>	<p>. The given key is E. But it is wrong key! The correct key is B. 0.9% NS. Explanation: Resuscitation is almost always with 0.9% NS. Here is hypokalaemia. Yes but to treat hypokalaemia the cut off value is below 2.5 mmol/L and absence of anuria during resuscitation. It was a several times discussed controversial question. So don't be confused. Maintenance is with fluid E.</p>
Additional Information	
<b>Reference</b>	Dr. Khalid
Dr Khalid/Rabia	

<b>Q: 346</b>	<p>A child was admitted following a RTA with initial GCS=15. Then during the night the noticed GCS reduced to 13. What is the management?</p> <p>a. Refer to neuro-surgeon  b. IV fluids  c. Oxygen  d. CT brain  e. Skull XR</p>
<b>Clincher(s)</b>	
A	
B	
C	
D	
E	

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<b>KEY</b>	The key is D. CT brain. [probable intracranial haemorrhage].
Additional Information	<b>Reduced GCS of less than 15, 2 hours post injury warrants a ct head scan</b>
<b>Reference</b>	Ohcs 779
Dr Khalid/Rabia	

<b>Q: 356</b>	<p>A 1m boy has been brought to the ED, conscious but with cool peripheries and has HR=222bpm.</p> <p>He has been irritable and feeding poorly for 24h. CXR=borderline enlarged heart with clear lung fields. ECG=regular narrow complex tachycardia, with difficulty identifying p wave. What is the single most appropriate immediate tx?</p> <p>a. Administer fluid bolus  b. Administer oxygen  c. Oral beta-blockers  d. Synchronized DC cardio-version  e. Unilateral carotid sinus massage</p>
<b>Clincher(s)</b>	
A	
B	
C	
D	
E	
<b>KEY</b>	<p>The key is D. Synchronised DC cardioversion.</p> <p>As the patient is in probable hemodynamic instability (suggested by cool peripheries) so we should go for DC cardioversion. Probable diagnosis is SVT.</p>
Additional Information	
<b>Reference</b>	Dr. khalid
Dr Khalid/Rabia	

<b>Q: 371</b>	<p>A young man who was held by the police was punched while in custody. He is now cyanosed and unresponsive. What is the 1st thing you would do?</p> <p>a. IV fluids  b. Clear airway  c. Turn pt and put in recovery position  d. Give 100% oxygen  e. Intubate and ventilate</p>
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<b>Clincher(s)</b>	
A	
B	
C	
D	
E	
<b>KEY</b>	The key is B. Clear airway. [ABC protocol].
Additional Information	<b><u>Unresponsive patient start resuscitation ABCDE</u></b>
<b>Reference</b>	
Dr Khalid/Rabia	

<b>Q: 420</b>	A 40yo chronic alcoholic who lives alone, brought in the ED having been found confused at home after a fall. He complains of a headache and gradually worsening confusion. What is the most likely dx? a. Head injury b. Hypoglycemia c. Extradural hematoma d. Subdural hematoma e. Delirium
<b>Clincher(s)</b>	
A	
B	
C	
D	
E	
<b>KEY</b>	The key is D. Subdural hematoma. [subdural hematoma may be acute or chronic. In chronic symptoms may not be apparent for several days or weeks. Symptoms of subdural hematomas are: fluctuating level of consciousness, ± insidious physical or intellectual slowing, sleepiness, headache, personality change and unsteadiness. Tx. Irrigation/evacuation e.g. via barr twist drill and barr hole craniostomy 1 <sup>st</sup> line. Craniotomy if the clot organized 2 <sup>nd</sup> line]. <b>MOST COMMON IN OLD PEOPLE AND DRUNKS WITH H/O FREQUENT FALLS</b>
Additional Information	
<b>Reference</b>	Dr. Khalid and rabia

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Dr Khalid/Rabia	
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<b>Q: 668</b>	<p>A 39yo man presents to the ED with persistent cough, sputum and dyspnea. He gave a hx of smoking 20 cigarettes/d for the last 10 years. Pt was given oxygen in ambulance but he is not improving. What is the next step?</p> <ol style="list-style-type: none"> <li>Prednisolone</li> <li>Salbutamol</li> <li>Check ABG</li> <li>CXR</li> <li>ECG</li> </ol>
<b>Clincher(s)</b>	
A	
B	
C	
D	
E	
<b>KEY</b>	The key is C. Check ABG. [The patient has COPD and as no improvement with oxygen, next step is to check ABG].
Additional Information	
<b>Reference</b>	
Dr Khalid/Rabia	<p>to assess hypoxia and co2 levels. it seems like this man has a chest infection. Salbutamol would be more appropriate if they mentioned wheezy chest COPD, with type two respiratory failure, patient is not getting better O2, so ABGs to proceed further to confirm dx and treat.</p> <p>&gt;&gt; whenever you initiate or change oxygen therapy, do an ABG within the next hour or sooner, if the patient is deteriorating.</p> <p>NICE guidelines from 2010 recommend the following:</p> <ul style="list-style-type: none"> <li>increase frequency of bronchodilator use and consider giving via a nebuliser</li> <li>give prednisolone 30 mg daily for 7-14 days</li> <li>it is common practice for all patients with an exacerbation of COPD to receive antibiotics. NICE do not support this approach. They recommend giving oral antibiotics 'if sputum is purulent or there are clinical signs of pneumonia'</li> </ul>



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<b>Q: 676</b>	A lady underwent debulking surgery for ovarian carcinoma. Soon after the surgery she presents with signs of intestinal obstruction. What is the single most appropriate inv? a. Pelvic CT b. CA 125 c. Laparotomy d. Laparoscopy e. Abdominal US
<b>Clincher(s)</b>	
A	
B	
C	
D	
E	
<b>KEY</b>	The key is C. Laparotomy. [Here it is diagnostic and therapeutic laparotomy].
<b>Additional Information</b>	
<b>Reference</b>	
Dr Khalid/Rabia	Abdominal CT then Laparotomy, while abdominal CT is not mentioned here so I will choose laparotomy. since the patient has stage 4 cancer, further management with the patient is focused on palliative care. with intestinal obstruction, laparotomy would be able to locate the level of obstruction, and place a colostomy/ ileostomy to relieve the obstruction Laparotomy. Or CECT abdomen which is not in the choice. Better never open without imaging. In Ca Ovary, Omental cake is one of the biggest challenge which leads to recurrent obstruction. And also loculated ascites.

<b>Q:</b>	
<b>Clincher(s)</b>	
A	
B	
C	
D	
E	
<b>KEY</b>	

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Additional Information	
<b>Reference</b>	
Dr Khalid/Rabia	

<b>Q:</b>	
<b>Clincher(s)</b>	
A	
B	
C	
D	
E	
<b>KEY</b>	
Additional Information	
<b>Reference</b>	
Dr Khalid/Rabia	

<b>Q:199</b>	A 33yo man is hit by a car. He loses consciousness but is found to be fine by the paramedics. When awaiting doctors review in the ED he suddenly becomes comatose. What is the most likely a. SAH b. Subdural hemorrhage c. Intracerebral hemorrhage d. Extradural hemorrhage
<b>Clincher(s)</b>	<b>Young man lost consciousness initially. Lucid interval noticed.</b>
A	
B	<b>Lucid interval</b> can occur both in Subdural and extra dural haemorrhage. The difference is that the presentation of the lucid interval (that is the gain of consciousness and the LOC) in <b>extra dural occurs within hours or 1-2 days</b> while in subdural it can take days to weeks upto 9 months.
C	
D	
E	
<b>KEY</b>	<b>D</b>
Additional Information	<b>Tests CT scan shows a haematoma (often biconvex/lens-shaped; the blood forms a more rounded shape compared with the sickle-shaped subdural haematoma. Skull X-ray may be normal or show fracture lines crossing the course of the middle meningeal</b>

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Reference	
Dr Khalid/Rabia	Extradural hemorrhage. [Age 33 (younger age), considerable head trauma, and lucid interval (present in both extradural and subdural) are the points in favor].

<b>Q:226</b>	<p>A 28 yo drug user presents to the ED with collapse and anuria. His serum K<sup>+</sup> = 7.5mmol/L. CXR = early pulmonary edema. What is the next appropriate management?</p> <ol style="list-style-type: none"> <li>Urgent hemodialysis</li> <li>IV calcium gluconate</li> <li>IV insulin + dextrose</li> <li>Furosemide</li> <li>IV NS 0.9%</li> </ol>
<b>Clincher(s)</b>	<b>Hyperkalemia on lab findings.</b>
A	
B	
C	
D	
E	
<b>KEY</b>	<b>B</b>
Additional Information	
<b>Reference</b>	Page 688 and 849 OHCM for hyper kalemia check ABG/VBG and ECG.
Dr Khalid/Rabia	<p><i>Hyperkalemia: A plasma potassium &gt;6.5mmol/L is an emergency and needs urgent treatment</i></p> <p><i>The worry is of myocardial hyperexcitability leading to ventricular fibrillation and cardiac arrest.</i></p> <p><b>Management:</b></p> <ol style="list-style-type: none"> <li><i>Stabilisation of the cardiac membrane With 10ml 10% intravenous calcium gluconate.</i></li> <li><i>Short-term shift in potassium from extracellular to intracellular fluid compartment by 10 units of actrapid insulin in 50ml of 20% dextrose infusion</i></li> </ol> <p><i>Removal of potassium from the body</i>  <i>calcium resonium (orally or enema)</i>  <i>loop diuretics</i>  <i>dialysis</i></p>

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<b>Q:266</b>	A 29yo male brought to ED in unconscious state. There is no significant past hx. Which of the following should be done as the initial inv? a. CT b. Blood glucose c. ABG d. MRI e. CBC
<b>Clincher(s)</b>	<b>Unconscious young male with no past hx.</b>
A	
B	
C	
D	
E	
<b>KEY</b>	<b>B</b>
Additional Information	<i>For all unconscious pts, paracetamol, salicylate levels and blood glucose are required. OHCM page 852</i>
<b>Reference</b>	
Dr Khalid/Rabia	Points in favour = Always check for hypoglycemia in unconscious patient first especially young patients with no significant past history. Assessing BSR levels is much easier and less invasive than other tests and quicker to rule out.

<b>Q:270</b>	A 24yo pt presented with anaphylactic shock. What would be the dose of adrenaline? a. 0.5ml of 1:1000 b. 0.5ml of 1:10000 c. 1ml of 1:500 d. 5ml of 1:1000 e. 0.05ml of 1:100
<b>Clincher(s)</b>	<b>Dose of anaphylactic shock in adult.</b>
A	IM
B	If pt is severely ill and cardiac arrest then IV dose should be titrated further to 1:10000
C	
D	
E	
<b>KEY</b>	<b>A</b>
Additional Information	<b>OHCM page 806, 807</b>

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<b>Reference</b>	
Dr Khalid/Rabia	

<b>Q:286</b>	286. A pt came to the ED with severe lower abdominal pain. Vitals: BP=125/85mmHg, Temp=38.9C. Exam: abdomen rigid, very uncomfortable during par vaginal. She gave a past hx of PID 3 years ago which was successfully treated with antibiotics. What is the appropriate inv? a. US b. Abdomen XR c. CT d. High vaginal e. Endocervical swab
<b>Clincher(s)</b>	
A	
B	
C	
D	
E	
<b>KEY</b>	<b>A</b>
Additional Information	
<b>Reference</b>	
Dr Khalid/Rabia	

<b>Q:311</b>	A 15yo boy presents with testicular pain for 2days. There is no hx of trauma. Exam: temp=38.5C, right hemi-scrotum tenderness. What is the single most appropriate management? a. Give antibiotics b. Give analgesia c. Reassure d. US scrotum e. Exploratory surgery
<b>Clincher(s)</b>	
A	
B	
C	
D	
E	
<b>KEY</b>	<b>A</b>
Additional	

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Information	
<b>Reference</b>	
Dr Khalid/Rabia	The diagnosis is epididymo-orchitis. Ans. 3. Points in favour: i) No history of trauma ii) testicular pain with fever points towards epididymo-orchitis.

<b>Q:336</b>	A 34yo man after a car crash is in the ED and deteriorating. His GCS has fallen from 13 to 7. What is the most appropriate next step? a. CT b. Burr hole c. MRI d. Intubation e. IV fluids
<b>Clincher(s)</b>	<b>Falling GCS and next appropriate measure</b>
A	
B	
C	
D	
E	
<b>KEY</b>	<b>D</b>
Additional Information	<p><i>Severe injury , GCS &lt; 8 . Consider airway protection.</i></p> <p><b>OHCM page 802</b></p> <p><b>Who needs a CT head</b></p> <ul style="list-style-type: none"> <li>• <i>GCS &lt; 13 at anytime or GCS 13/14 at 2hrs following injury</i></li> <li>• <i>Focal neurological deficit</i></li> <li>• <i>Suspected open or depressed fracture</i></li> <li>• <i>Post traumatic seizure</i></li> <li>• <i>Vomiting &gt;once</i></li> <li>• <i>Loss of consciousness and any of the following</i></li> <li>• <i>Age&gt;65, coagulopathy, dangerous mechanism of injury eg car crash or fall from great height</i></li> <li>• <i>Anterograde amnesia of &gt;30 min</i></li> </ul> <p><b>OHCM page 838</b></p>
<b>Reference</b>	
Dr Khalid/Rabia	The key is D. Intubation. [ABC protocol].

<b>Q:339</b>	34yo man was brought to the ED after a RTA. BP=50/0mmHg and chest wall not moving symmetrically, RR=34bpm. What would be initial action? a. IV fluid infusion
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	b. Intubation and ventilation c. CT chest d. Transfer to ITU
<b>Clincher(s)</b>	
A	
B	
C	
D	
E	
<b>KEY</b>	<b>B</b>
Additional Information	<p><i>When to ventilate immediately:</i></p> <ul style="list-style-type: none"> <li>• Coma &lt;8 on GCS</li> <li>• PaCO<sub>2</sub> &gt;6kpa or PO<sub>2</sub>&lt;9kpa</li> <li>• Spontaneous hyperventilation and PaCO<sub>2</sub> &lt;3.5kpa</li> <li>• Respiratory Irregularity</li> </ul> <p><b>OHCM page 838</b></p>
<b>Reference</b>	
Dr Khalid/Rabia	key is B. Intubation and ventilation [ABC protocol].

<b>Q:</b>	
<b>Clincher(s)</b>	
A	
B	
C	
D	
E	
<b>KEY</b>	
Additional Information	
<b>Reference</b>	
Dr Khalid/Rabia	

<b>Q: 1037</b>	<p>A man with dementia has an ulcerative lesion on his forehead. He wants it removed so 'it can help improve his memory'. Wife says he is not fit to give consent. What will you do?</p> <ul style="list-style-type: none"> <li>a. Get letter signed from the GP</li> <li>b. Get letter signed from the wife</li> <li>c. Get letter signed from the pt</li> <li>d. Refer to psychiatrist to assess the mental capacity to give consent</li> </ul>

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Clincher(s)	
A	
B	
C	
D	
<b>KEY: D</b>	<p><b>Refer to psychiatrist to assess the mental capacity to give consent</b></p> <ul style="list-style-type: none"> <li>Consent in the incapacitated (NHS consent form 4).<sup>7</sup> No-one (parents, relatives, or even members of a healthcare team) is able to give consent on behalf of an adult in England, and the High Court may be required to give a ruling on the matters of lawfulness of a proposed procedure. Proceeding in a patient's best interest is decided by the clinician overseeing their care, although it is always good practice to involve family in the proposed course of treatment.</li> </ul>
Additional Information	
<b>Reference</b>	<a href="#">OHCM pg: 571</a>
Dr Khalid/Rabia	According to OHCM, consent in incapacitated requires a formal assessment to be documented in medical notes. No one is able to give consent on behalf of any adult even if he is incapacitated. So he should be referred to a psychiatrist.

<b>Q: 1050</b>	<p>A 23yo man presents with severe pain in the right flank radiating to his groin. He is rolling about on the floor. An IVU confirms a stone in the ureter which is 8mm in size. Which tx modality will be most effective?</p> <ol style="list-style-type: none"> <li>Fluids and alpha blockers</li> <li>ESWL</li> <li>CCB</li> <li>Dormier basket</li> <li>PCNL</li> </ol>
<b>Clincher(s)</b>	<b>23Yo, man, stone in the ureter, 8mm in size</b>
A	
B	extracorporeal shockwave lithotripsy (ESWL)
C	
D	<p>A ureteroscope is a fine-bore instrument that is passed into the ureter for the purposes of:</p> <ul style="list-style-type: none"> <li>stone extraction</li> <li>tumour biopsy</li> <li>stricture dilatation</li> </ul> <p>The technique is performed under epidural or general anaesthesia with antibiotic cover, for example, a single dose of ciprofloxacin. With the patient placed in the lithotomy position, cystoscopy is performed to identify the ureteric orifices. The ureteroscope may then be inserted carefully into the ureter.</p> <p>Flexible ureteroscopes have largely replaced rigid instruments. However, their small calibre places restrictions on the size of manipulative instruments that may be admitted.</p>
E	Percutaneous nephrolithotomy (PCNL) - keyhole surgery to remove stones, when large, multiple, or complex



<b>KEY: B</b>	<p><b>ESWL (between 5-10mm)</b></p> <p><b>R: Initially:</b> Analgesia, eg <i>diclofenac</i> 75mg IV/IM, or 100mg PR.<sup>225</sup> (If CI: opioids) + IV fluids if unable to tolerate PO; antibiotics (eg <i>cefuroxime</i> 1.5g/8h IV, or <i>gentamicin</i>) if infection. <b>Stones &lt;5mm in lower ureter:</b> ~90-95% pass spontaneously. ↑fluid intake. <b>Stones &gt;5mm/pain not resolving:</b> Medical expulsive therapy: <i>nifedipine</i> 10mg/8h PO<sup>226</sup> or α-blockers (<i>tamsulosin</i> 0.4mg/d<sup>227</sup>) promote expulsion and reduce analgesia requirements.<sup>228</sup> ▶ start at presentation.<sup>229</sup> Most pass within 48h (&gt;80% after ~30d). If not, try extracorporeal shockwave lithotripsy (ESWL) (if &lt;1cm), or ureteroscopy using a basket.<sup>230</sup> ESWL: US waves shatter stone. SE: renal injury, may also cause ↑BP and DM.<sup>231</sup> Percutaneous nephrolithotomy (PCNL): keyhole surgery to remove stones, when large, multiple, or complex.<sup>232</sup> Open surgery is rare.</p> <p>▶ <b>Indications for urgent intervention</b> (delay kills glomeruli): Presence of infection and obstruction—a percutaneous nephrostomy or ureteric stent may be needed to relieve obstruction (p642); urosepsis; intractable pain or vomiting; impending ARF; obstruction in a solitary kidney; bilateral obstructing stones.<sup>232</sup></p> <p><b>Though for 8 mm stone we can use medical expulsive therapy but for this patient with agonizing pain “most effective” therapy seems to be ESWL</b></p>
Additional Information	
Reference	OHCM pg: 640
Dr Khalid/Rabia	<p>Rx options for stone include:</p> <ul style="list-style-type: none"> <li>· Extracorporeal shock wave lithotripsy (ESWL) - shock waves are directed over the stone to break it apart. The stone particles will then pass spontaneously.</li> <li>· Percutaneous nephrolithotomy (PCNL) - used for large stones (&gt;2 cm), staghorn calculi and also cystine stones. Stones are removed at the time of the procedure using a nephroscope.</li> </ul>

<b>Q: 1061</b>	<p>A 72yo lady is drowsy and her relatives want to take her home. She has been prescribed diazepam 2.5mg. What is the best delivery route?</p> <p>a. Oral b. IV c. IM d. Per rectal e. SC</p>
<b>Clincher(s)</b>	
A	
B	
C	
D	
E	<b>Subcutaneous (sc)</b>
<b>KEY: D</b>	<b>Per rectal</b>

	<p><b>Dose</b></p> <ul style="list-style-type: none"> <li>• By mouth, anxiety, 2 mg 3 times daily increased if necessary to 15–30 mg daily in divided doses; ELDERLY (or debilitated) half adult dose Insomnia associated with anxiety, 5–15 mg at bed-time</li> <li>• By intramuscular injection or slow intravenous injection (into a large vein, at a rate of not more than 5 mg/minute), for severe acute anxiety, control of acute panic attacks, and acute alcohol withdrawal, 10 mg, repeated if necessary after not less than 4 hours</li> </ul> <p><b>Note</b> Only use intramuscular route when oral and intravenous routes not possible</p> <ul style="list-style-type: none"> <li>• By slow intravenous injection (into a large vein, at a rate of not more than 5 mg/minute), for acute drug-induced dystonic reactions, 5–10 mg repeated as necessary after at least 10 minutes; CHILD 1 month–12 years, 100 micrograms/kg repeated as necessary after at least 10 minutes</li> <li>• By rectum as rectal solution, acute anxiety and agitation, 500 micrograms/kg repeated after 12 hours as required; ELDERLY 250 micrograms/kg; CHILD not recommended</li> </ul> <p><b>Note</b> Emulsion formulation preferred for intravenous injection; special precautions for intravenous injection, see section 4.8.2</p> <p>Diazepam or lorazepam are very occasionally administered intravenously for the control of panic attacks. This route is the most rapid but the procedure is not without risk (section 4.8.2) and should be used only when alternative measures have failed. The intramuscular route has no advantage over the oral route.</p>
Additional Information	
Reference	BNF 67 pg: 225
Dr Khalid/Rabia	<p>Delivery is Per rectal.</p> <p>Diazepam is not absorbed properly via the oral or IM route.</p> <p>The IV route presents difficulties for non-medical carers.</p> <p>The SC route is contraindicated in old people.</p>

## EMERGENCY-System Wise 1700-by Sush and Team. 2016

Susmita, Asad, Manu, Saima, Zohaib, Savia, Shanu, Mona, Manisha, Sitara, Samreena, Sami and Komal

<b>Q: 1067</b>	<p>A 45yo woman has recently been dx with MS and has been started on oral steroids. She is brought to the hosp after having ingested 100 paracetamol tablets 4h ago. She is refusing all med tx. What is the next best step?</p> <ol style="list-style-type: none"> <li>Observe</li> <li>Refer to psychiatrist to assess pts ability to refuse tx</li> <li>Gastric lavage</li> <li>Activated charcoal</li> <li>Refer to social worker</li> </ol>
<b>Clincher(s)</b>	
A	
B	
C	
D	
E	
<b>KEY: B???</b>	<p><b>Medicolegal issues—use of Common Law in clinical situations</b></p> <p><b>Clinical situations</b> <i>Deliberate self-harm</i> Adapted from Feldman 2000:<sup>518</sup></p> <p>A 30 year old male is brought to A&amp;E after an overdose. There is no history available and the patient refuses to say anything, other than he wants to be left alone to die. He refuses to give blood for a drug level and is refusing any treatment. What should we do? Should we assume he has full capacity? If so, he may die—but autonomy is maintained. Or should the clinician act in the patient's best interests (the doctrine of necessity) as part of their duty of care? Most people who self-harm are depressed—but this does not prove incapacity. However, in the acute setting, Feldman asserts that 'there are usually good grounds for reasonable doubt with respect to the patient's capacity to make a fully informed and reasoned choice, and to proceed with whatever action is necessary to save his life under the common law'.</p>
<b>Additional Information</b>	
<b>Reference</b>	OHCS pg: 403
Dr Khalid/Rabia	

<b>Q: 1194</b>	<p>A 7yo girl with allergy became acutely unwell while visiting a friend's house and has been brought immediately to the ED. She is fully conscious but has got stridor, wheeze and erythematous rash. She is receiving oxygen. What is the single immediate management?</p> <ol style="list-style-type: none"> <li>Check airway patency and prepare intubation</li> <li>Give 0.25ml in 1000U epinephrine IM</li> <li>Give 10mg chlorphedramine IM</li> <li>Give 50ml hydrocortisone IM</li> <li>Obtain secure IV access</li> </ol>
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<b>Clincher(s)</b>	<b>7yo, Anaphylaxis, Pt is receiving O<sub>2</sub>. Next immediate management?</b>
A	
B	
C	
D	
E	
<b>KEY: B</b>	<p><b>Give 0.25ml in 1000U epinephrine IM</b></p> <pre> graph TD     A[Management of anaphylaxis<sup>8</sup>] --&gt; B[Secure the airway—give 100% O<sub>2</sub> Intubate if respiratory obstruction imminent]     B --&gt; C[Remove the cause; raising the feet may help restore the circulation]     C --&gt; D[Give adrenaline IM 0.5mg (ie 0.5mL of 1:1000) Repeat every 5min, if needed as guided by BP, pulse, and respiratory function, until better]     D --&gt; E[Secure IV access]                     </pre>

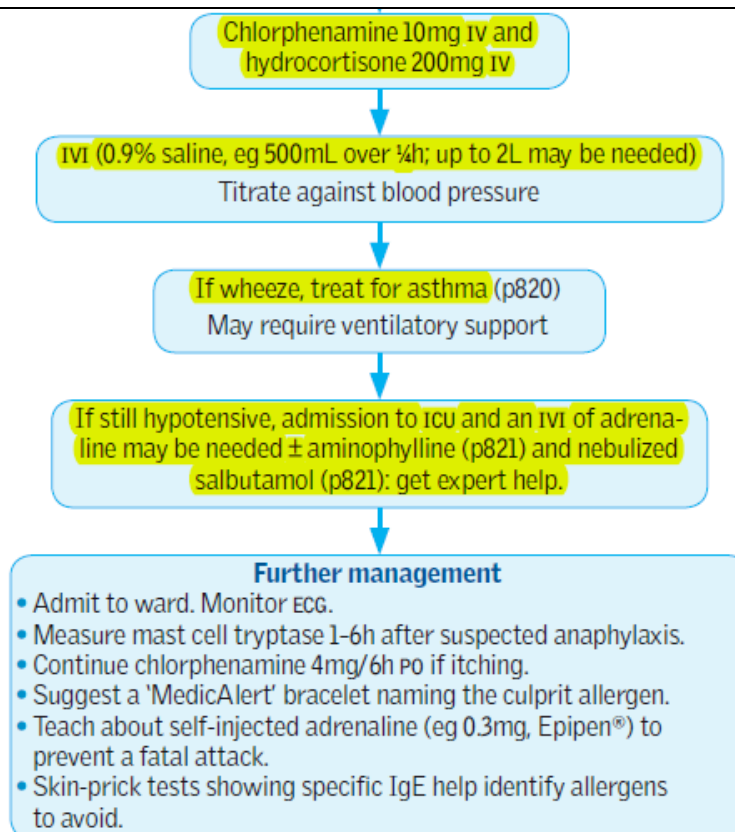


Fig 1. Management of anaphylaxis.

▶▶ Adrenaline (=epinephrine) is given IM and NOT IV unless the patient is severely ill, or has no pulse. The IV dose is different: 100µg/min—titrating with the response. This is 0.5mL of 1:10,000 solution per minute. Stop as soon as a response has been obtained.

If on a β-blocker, consider salbutamol IV in place of adrenaline

## ►► Anaphylaxis

(Adrenaline=epinephrine) resus.org.uk

Never blame yourself for forgetting anything, except your humanity (and the dose of adrenaline).

- Call the resuscitation/cardiac arrest team (paramedics if in the community).
- Ideally place patient on back with legs raised. If they have significant respiratory distress allow the patient to put themselves in a position of comfort. Do not let them stand or sit up rapidly. If comatose, use left-lateral position (to prevent caval compression).
- ABCDE: Airway (any swelling, hoarseness, stridor?); breathing (rate ↑, wheeze, fatigue, cyanosis,  $S_pO_2 < 92\%$ ?); circulation (pale, clammy, BP ↓, faints?); disability (conscious level, eg drowsy/coma?); exposure of skin (erythema/urticaria?).
- The chief drug priority is adrenaline. Give intra-muscularly (IM). Use a suitable syringe for measuring small volumes; absolute accuracy isn't essential.<sup>803</sup> Note strength! (1 : 1000 not 1 : 10,000.)

IM dose of 3 drugs:	Adrenaline 1:1000	Chlorphenamine	Hydrocortisone
If aged <6 months	0.15mL (150µg) <sup>[13]</sup>	25µg/kg	25mg
If aged 6 months–6yrs	0.15mL (150µg)	2.5mg	50mg
Dose if aged 6–12yrs	0.3mL (300µg)	5mg	100mg
Adolescent/adult dose	0.5mL (500µg)	10mg	200mg

- Repeat adrenaline dose after 5min if no improvement. Also: high-flow  $O_2$  (±IPPV) & crystalloid (20mL/kg IV). NB: weight (kg) ≈ 2(age in yrs + 4). ok if 1–10yrs old.
- Remove the trigger, eg bee sting; turn off any drug or colloid IV.

Additional Information

Reference

OHCM pg: 807, OHCS pg: 237

Dr Khalid/Rabia

b. Give 0.25ml in 1000U epinephrine IM

Adrenaline is by far the most important drug in anaphylaxis and should be given as soon as possible. The recommended doses for adrenaline, hydrocortisone and chlorphenamine are as follows:

	Adrenaline	Hydrocortisone	Chlorphenamine
< 6 months	150 micrograms (0.15ml 1 in 1,000)	25 mg	250 micrograms/kg
6 months - 6 years	150 micrograms (0.15ml 1 in 1,000)	50 mg	2.5 mg
6-12 years	300 micrograms (0.3ml 1 in 1,000)	100 mg	5 mg
Adult and child > 12 years	500 micrograms (0.5ml 1 in 1,000)	200 mg	10 mg

Adrenaline can be repeated every 5 minutes if necessary. The best site for IM injection is the anterolateral aspect of the middle third of the thigh.

Q: 1198

A boy was admitted with partial thickness burn, what is your next step?  
a. Escharectomy



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	b. Dressing c. Burst blisters d. Local antibiotics e. Refer to burn unit
<b>Clincher(s)</b>	
A	Full thickness burns
B	
C	
D	
E	
<b>KEY: E</b>	<p><b>Resuscitate and arrange transfer for all major burns</b> (&gt;25% partial thickness in adults and &gt;20% in children). Assess site, size, and depth of burn (fig 1, to help calculate fluid requirements). <b>Referral is still warranted in cases of full thickness burns &gt;5%, partial thickness burns &gt;10% in adults or &gt;5% in children or the elderly, burns of special sites, chemical and electrical burns and burns with inhalational injury.</b></p> <p><b>Assessment</b> <i>Burn size</i> is important to assess (see fig 1, BOX 2) as it influences the size of the inflammatory response (vasodilatation, increased vascular permeability) and thus fluid shift from the intravascular volume. Ignore erythema. <i>Burn depth</i> determines healing time/scarring; assessing this can be hard, even for the experienced. The big distinction is whether the burn is partial thickness (painful, red, and blistered) or full thickness (insensate/painless; grey-white). NB: burns can evolve, particularly over the first 48h.</p> <p><b>Treatment</b> 'Cool the burn, warm the patient'. Do <i>not</i> apply cold water to extensive burns for long periods: this may intensify shock. <b>Take care with circumferential full thickness burns of the limbs</b> as compartment syndrome may develop rapidly particularly after fluid resuscitation. Decompress (escharotomy and fasciotomy) as needed. <b>If transferring to a burns unit, do not burst blisters or apply any special creams as this can hinder assessment</b> Simple saline gauze or paraffin gauze is suitable; cling film is useful as a temporary measure and relieves pain. Titrate morphine IV for good</p>
Additional Information	
<b>Reference</b>	OHCM pg: 858
Dr Khalid/Rabia	<p><b>All complex injuries should be referred - particularly</b></p> <ul style="list-style-type: none"> <li>• <b>Age under 5 years or over 60 years.</b></li> <li>• <b>Site of injury: face, hands, perineum, any flexure (including neck or axilla) and circumferential dermal burns or a full-thickness burn of the limb, torso or neck.</b></li> <li>• <b>Inhalation injury.</b></li> <li>• <b>Mechanism of injury:</b> <ul style="list-style-type: none"> <li>~ <b>Chemical burns affecting over 5% total body surface area burned (over 1% for hydrofluoric acid burns).</b></li> <li>~ <b>Exposure to ionising radiation.</b></li> <li>~ <b>High-pressure steam injury.</b></li> <li>~ <b>High-tension electrical injury.</b></li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• <b>Suspected non-accidental injury in a child.</b></li> <li>• <b>Large affected area:</b> <ul style="list-style-type: none"> <li>~ <b>Age under 16 years: over 5% total body surface area burned.</b></li> <li>~ <b>Age 16 years or older: over 10% total body surface area burned.</b></li> </ul> </li> <li>• <b>Co-existing conditions - eg, serious medical conditions, pregnancy or associated fractures, head injury or crush injuries.</b></li> </ul>
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<b>Q: 1235</b>	<p>A 45yo female comes to the ED while having a generalized tonic clonic seizure and she has having difficulty breathing and is cyanosed. What is the tx option for her?</p> <p>a. Secure airways b. IV diazepam c. IV phenytoin d. Oxygen mask</p>
<b>Clincher(s)</b>	
A	
B	
C	
D	
<b>KEY: A</b>	<p><b>Secure the airways</b></p> <div style="text-align: center;"> <p><b>Management of status epilepticus</b></p> <p>Open and maintain the airway, lay in recovery position Remove false teeth if poorly fitting, insert oral/nasal airway, intubate if necessary</p> <p>↓</p> <p>Oxygen, 100% + suction (as required)</p> <p>↓</p> <p>IV access and take blood: U&amp;E, LFT, FBC, glucose, Ca<sup>2+</sup> Toxicology screen if indicated Anticonvulsant levels</p> <p>↓</p> <p>Slow IV bolus phase—to stop seizures: eg lorazepam 2-4mg. Give 2<sup>nd</sup> dose of lorazepam if no response within 10min.</p> <p>↓</p> </div>



	<pre> graph TD     A["Thiamine 250mg IV over 30min if alcoholism or malnourishment suspected. Glucose 50mL 50% IV, unless glucose known to be normal Treat acidosis if severe (contact ICU)"] --&gt; B["Correct hypotension with fluids"]     B --&gt; C["IV infusion phase: If seizures continue, start phenytoin, 15-20mg/kg IVI, at a rate of ≤50mg/min. Monitor ECG and BP. 100mg/6-8h is a maintenance dose (check levels). Alternative: diazepam infusion: 100mg in 500mL of 5% glucose; infuse at ~40mL/h as opposite"]     C --&gt; D["General anaesthesia phase: Continuing seizures require expert help with paralysis and ventilation with continuous EEG monitoring in ICU"]         </pre> <p><b>ig 1.</b> Management of status epilepticus.  <b>B:</b> ► <b>never</b> spend longer than 20min on someone with status epilepticus without aving help at the bedside from an anaesthetist.</p>
Additional Information	
Reference	<a href="#">OHCM pg: 837</a>
Dr Khalid/Rabia	<p>Management of Status Epilepticus (A)</p> <ul style="list-style-type: none"> <li>- Step-wise approach</li> <li>- Open and maintain the airway, lay in recovery position. Remove false teeth if poorly fitting, insert oral nasal airway, intubate if necessary</li> <li>- Oxygen, 100% + suction (as required)</li> <li>- IV access and take blood for investigations</li> <li>- Slow IV bolus phase: to stop seizures, e.g, Lorazepam, Diazepam</li> <li>- Correct hypotension with fluids</li> <li>- IV infusion phase: If seizures continue start phenytoin. Alternate: Diazepam infusion</li> <li>- General anesthesia phase</li> </ul>

<b>Q: 1359</b>	<p>A pt after his house fire, came with hematemesis with erosion/ulcer of esophagus and on examination there is 55% burn and on endoscopy there is a stomach/gastric erosion and soot in the mouth. What is the tx?</p> <ol style="list-style-type: none"> <li>PO PPI</li> <li>IV PPI</li> <li>PPI and antibiotic</li> <li>H. pylori test</li> <li>Tracheal intubation</li> </ol>
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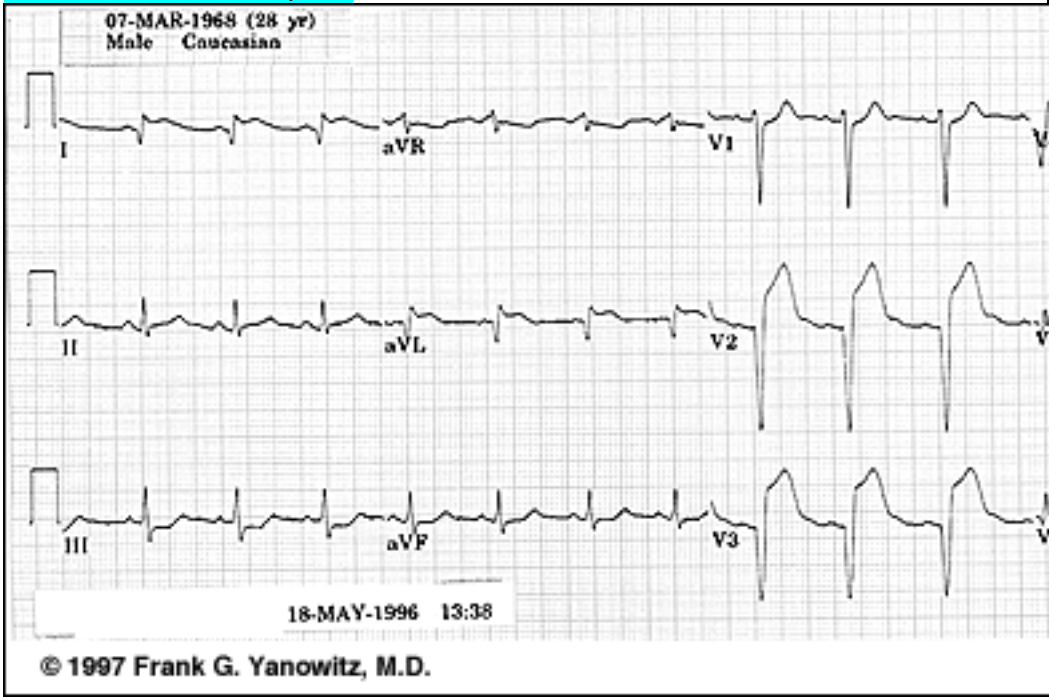
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<b>Clincher(s)</b>	<b>Soot in the mouth</b>
A	
B	
C	
D	
E	
<b>KEY: E</b>	<b>Tracheal intubation should be done to prevent airway blockage secondary to laryngeal edema.</b>
Additional Information	
<b>Reference</b>	
Dr Khalid/Rabia	

<b>Q:681</b>	<p>A 27yo female was brought to the ED by her friend from a movie theatre. She complains of sudden severe pain in the eye followed by vomiting and also was seeing colored halos. She gives a past hx of recurrent headaches which used to resolve spontaneously. Exam: fixed, dilated ovoid pupil seen. What is the first inv?</p> <p>a. CT head b. MRI orbits c. Blood culture and sensitivity d. Toxicology screen e. Applanation tonometry</p>
<b>Clincher(s)</b>	
A	
B	
C	
D	
E	
<b>KEY</b>	<b>e. Applanation tonometry</b>
Additional Information	<p>With Halos with eye pain acute angle closure glaucoma should be rule out. So option should be E. Here in theatre(usually dark) , her pupil have dilated and aggravated the symptom of glaucoma.</p> <p>movie theatre ---&gt;lights off ----&gt; pupil fully dilated----&gt; angle closed---&gt;obstruction of fluid flow from anterior chamber---&gt; increased pressure in anterior chamber---&gt; AACG</p>

	<p>Diagnosis is Acute Angle Closure glaucoma. It is based on the finding of two symptoms of ocular pain, nausea/vomiting, and a history of intermittent blurring of vision with haloes and at least three signs of the following: IOP greater than 21 mm Hg, conjunctival injection, corneal epithelial oedema, mid-dilated non-reactive pupil and shallower chamber in the presence of occlusion.</p> <p>Features</p> <ul style="list-style-type: none"> <li>• severe pain: may be ocular or headache</li> <li>• decreased visual acuity</li> <li>• symptoms worse with mydriasis (e.g. watching TV in a dark room)</li> <li>• hard, red eye</li> <li>• haloes around lights</li> <li>• semi-dilated non-reacting pupil</li> <li>• corneal oedema results in dull or hazy cornea</li> <li>• systemic upset may be seen, such as nausea and vomiting and even abdominal pain</li> </ul> <p>Management</p> <ul style="list-style-type: none"> <li>• urgent referral to an ophthalmologist</li> </ul> <p>management options include reducing aqueous secretions with acetazolamide and inducing pupillary constriction with topical pilocarpine</p>
<b>Reference</b>	
Dr Khalid/Rabia	

<b>Q:684</b>	<p>A 56yo man presents to the ED with chest pain. The following ECG was taken. What is the most likely dx?</p> 
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	a. Anterior MI b. Inferior MI c. Lateral MI d. Posterior MI e. NSTEMI																		
Clincher(s)																			
A																			
B																			
C																			
D																			
E																			
KEY	a. Anterior MI																		
Additional Information	<table><tr><td></td><td>ECG changes</td><td>Coronary artery</td></tr><tr><td>Anteroseptal</td><td>V1-V4</td><td>Left anterior descending</td></tr><tr><td>Inferior</td><td>II, III, aVF</td><td>Right coronary</td></tr><tr><td>Anterolateral</td><td>V4-6, I, aVL</td><td>Left anterior descending or left circumflex</td></tr><tr><td>Lateral</td><td>I, aVL +/- V5-6</td><td>Left circumflex</td></tr><tr><td>Posterior</td><td>Tall R waves V1-2</td><td>Usually left circumflex, also right coronary</td></tr></table>		ECG changes	Coronary artery	Anteroseptal	V1-V4	Left anterior descending	Inferior	II, III, aVF	Right coronary	Anterolateral	V4-6, I, aVL	Left anterior descending or left circumflex	Lateral	I, aVL +/- V5-6	Left circumflex	Posterior	Tall R waves V1-2	Usually left circumflex, also right coronary
	ECG changes	Coronary artery																	
Anteroseptal	V1-V4	Left anterior descending																	
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Lateral	I, aVL +/- V5-6	Left circumflex																	
Posterior	Tall R waves V1-2	Usually left circumflex, also right coronary																	
Reference																			
Dr Khalid/Rabia																			

<b>Q:686</b>	A man comes to the ED with hx of pulsatile swelling in the abdomen, he has hx of HTN and exam: pulse=120bpm, BP=70/40mmHg. He is restless and in shock. What emergency management should be done on priority basis?
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	<ul style="list-style-type: none"> <li>a. Urgent abdominal CT</li> <li>b. Urgent abdominal US</li> <li>c. IV fluids 0.9% NS crystalloids to bring SBP to 90mmHg</li> <li>d. IV fluids 0.9% NS crystalloids to bring SBP to 120mmHg</li> <li>e. Dopamine inj</li> </ul>
<b>Clincher(s)</b>	<b>Aortic aneurism picture, pt in shock</b>
A	
B	
C	
D	
E	
<b>KEY</b>	<p><b>c. IV fluids 0.9% NS crystalloids to bring SBP to 90 mmHg</b></p> <p>Aortic aneurism rupture with hypovolemic shock.. first step is to give crystalloids for resus to bring the systolic bp up to a min of 90 our target sbp should be &lt;100 here bcoz he's hypertensive and the autoregulatory mech in chronic HTN wl maintain higher bp once sbp is corrected to 90...again if sbp is corrected to higher levels by crystalloids, it may increase preload and predispose to MI, CVA in AAA rupture</p> <p>C, then A, then surgery</p>
Additional Information	
<b>Reference</b>	
Dr Khalid/Rabia	

<b>Q:714</b>	<p>A man with carcinoma and multiple metastasis presents with intractable nausea and vomiting. He has become drowsy and confused. What is the most appropriate management?</p> <ul style="list-style-type: none"> <li>a. Dexamethasone IM</li> <li>b. Dexamethasone PO</li> <li>c. Ondansetron IM</li> <li>d. Ondansetron PO</li> <li>e. Morphine oral</li> </ul>
<b>Clincher(s)</b>	
A	

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B	
C	
D	PO route cannot be used as the patient is vomiting
E	Might be contra as pt is already drowsy- cause resp depression
KEY	c-ondansetron
Additional Information	Ondansetron is a 5HT-3 blocker mostly used for chemotherapy induced vomiting. Dexta and morphine have no role in this case.
Reference	
Dr Khalid/Rabia	

<b>Q:720</b>	<p>. A 65yo known alcoholic is brought into the hospital with confusion, aggressiveness and ophthalmoplegia. He is treated with diazepam. What other drug would you like to prescribe?</p> <ol style="list-style-type: none"> <li>Antibiotics</li> <li>Glucose</li> <li>IV fluids</li> <li>Disulfiram</li> <li>Vit B complex</li> </ol>
<b>Clincher(s)</b>	An alcoholic who presents with the triad of <b>ophthalmoplegia, ataxia and confusion is wernicke's syndrome</b> It occurs due to vitamin B1 deficiency (thiamine def).
A	
B	
C	
D	disulfiram is used to treat chronic alcoholism
E	
KEY	e-vit bcomplex
Additional Information	An alcoholic who presents with the triad of <b>ophthalmoplegia, ataxia and confusion is wernicke's syndrome</b> . It occurs due to vitamin B1 deficiency (thiamine def).
Reference	
Dr Khalid/Rabia	

<b>Q:754</b>	. A young lady after a heavy bout of drinking last night comes to the ED with dizziness, abdominal pain, vomiting blood with cool peripheries. After initial
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Susmita, Asad, Manu, Saima, Zohaib, Savia, Shanu, Mona, Manisha, Sitara, Samreena, Sami and Komal

	resuscitation, oxygen and fluids, she still continues to bleed with pulse=130bpm and BP=85/58mmHg. What would be your next best management? a. Clotting screen b. US c. CT d. Endoscopy e. Omeprazole
<b>Clincher(s)</b>	<b>Alcoholic --- weiss Mallory synd – (leads to esophageal tear)</b>
A	
B	
C	
D	
E	
<b>KEY</b>	<b>d- endoscopy</b>
Additional Information	
<b>Reference</b>	
Dr Khalid/Rabia	

<b>Q:767</b>	. A pt with SNHL and loss of corneal reflex on the left side. What is the most definitive inv? a. CT of internal auditory meatus b. Nuclear imaging of brain c. MRI of internal auditory meatus d. Radio isotope scan e. XR skull
<b>Clincher(s)</b>	
A	
B	
C	MRI of internal auditory meatus and CP angle would show the tumour
D	
E	
<b>KEY</b>	<b>c- mri</b>
Additional Information	Unilateral sensorineural hearing loss and loss of corneal reflex indicate involvement of facial, trigeminal and vestibulocochlear nerve which is common in acoustic neuroma. MRI of internal auditory meatus and CP angle would show the tumour. Acoustic Neuroma: Presentation: progressive ipsilateral tinnitus, sensorineural deafness. Big tumours may cause ipsilateral cerebellar signs or raised ICP. 5, 6, 7 cranial nerves at risk.

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	Investigations: MRI TREatment: surgery
<b>Reference</b>	
Dr Khalid/Rabia	

<b>Q:778</b>	A 56yo man complains of increased vol of sputum with specks of blood and chest pain. He has ahx of DVT. Exam: clubbing. What is the cause of blood in his sputum? a. Pulmonary thrombosis b. Bronchial carcinoma c. Bronchiectasis d. Pulmonary TB
<b>Clincher(s)</b>	<b>Hemoptysis, hx of DVT ,clubbing shows chronic lung disease</b>
A	Acute breathlessness, chest pain , hemoptysis, no hx of sputum <b>how ever risk factor hx of DVT present</b>
B	Lack of risk factors – such as smoking how ever it does cause clubbing
C	
D	<b>Causes post infection bronchiectasis, other constitutional symp fever wt loss absent</b>
E	
<b>KEY</b>	<b>c- bronchiectasis</b>
Additional Information	Bronchiectasis permanent dilatation and thickening of airways characterised by cough, copious purulent sputum, recurrent infection signs: coarse crackles, often in lower zones. Ronchi Wheeze Inv: CXR HRCT gold standard Sputum microbiology Differentials: COPD, Asthma, TB, pneumonia, sinusitis Treatment: chest physio, postural drainage Stop smoking Antibiotics Amoxicillin is first line Cipro in pseudomonas patients for 14 days
<b>Reference</b>	
Dr Khalid/Rabia	

Q: 149	A girl with hx of allergies visited a friend's farm. She got stridor, wheeze and
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	erythematous rash. What is the most appropriate tx? a. 0.25ml IM adrenaline b. 0.25ml PO adrenaline c. 0.25ml IM adrenaline d. IV chlorphearamine
Clincher(s)	
A	[Presence of stridor and wheeze are suggestive of anaphylaxis and treatment option is adrenaline].
B	
C	
D	
E	
KEY	The key is A. 0.25 ml IM adrenaline ( C is also same)
Additional Information	
Reference	
Dr Khalid/Rabia	Consider anaphylaxis when there is compatible history of rapid-onset severe allergic type reaction with respiratory difficulty and/or hypotension, especially if there are skin changes present and the treatment of anaphylaxis is IM adrenaline not anti histamine  Treatment: ABCDE, Oxygen, IM Adrenaline. <6yrs 0.15ml, 6-12yrs 0.3ml, >12 yrs 0.5ml 1:1000  Since the age of the girl is not mentioned here and options A & C are the same so A or C could be the answers supposing the girl was 6-12 yrs of age.

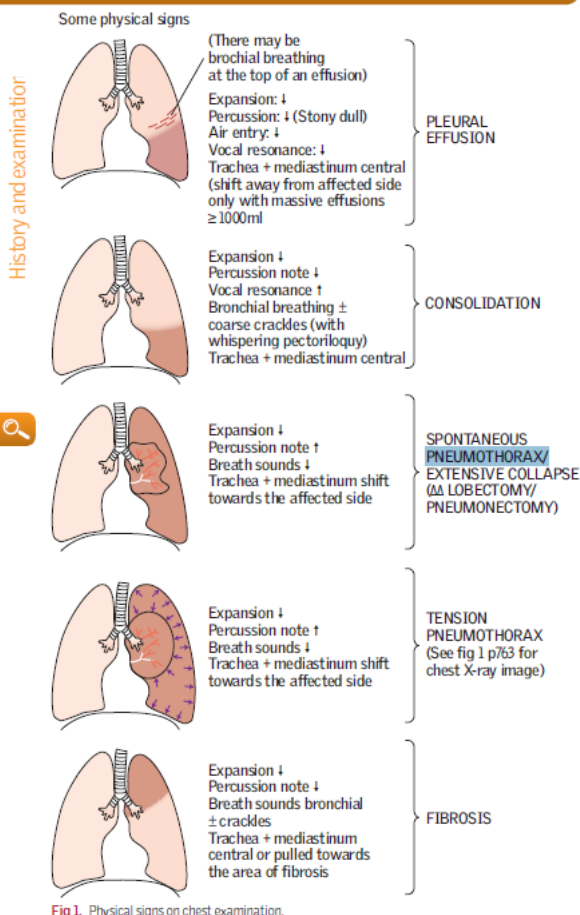
Q: 152	A 23yo man has been stabbed in the back and has SOB. The trachea is not deviated, he has engorged neck veins and absent breath sounds on the right. What is the most appropriate dx? a. Tension pneumothorax b. Cardiac tamponade c. Simple pneumothorax d. Hemothorax e. Pleural effusion
Clincher(s)	
A	Points in favour: i) Stab wound in the back ii) SOB iii) Engorged neck vein iv) Absent breath sound. Trachea may not be displaced or away from affected

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	site.
B	<p>Cardiac Tamponade- 15 % chest injuries, Dx- Beck's triad- rising JVP, falling BP, small quiet heart ( Pulsus Paradoxus), 722 OHCS, black stripe around heart indicates fluid.</p> <p>INITIAL MX- Pericardial aspiration</p> <p>Crossmatched blood atleast 6 units</p> <p>Large bore IV cannula</p> <p>Monitor vital signs</p> <p>Blood gases</p> <p>CXR</p> <p>ECG Monitoring</p> <p>ITU CARE with a chest drain immediately</p> <p>Facility for immediate thoracotomy</p>
C	Simple pneumothorax- Trachea displaced towards same side
D	Hemothorax- Trachea displaced towards same side,
E	<p>Pleural effusion - <i>Decreased expansion; stony dull percussion note; diminished breath sounds</i> occur on the affected side. Tactile vocal fremitus and vocal resonance are (inconstant and unreliable). Above the effusion, where lung is compressed, there may be <i>bronchial breathing</i>. With large effusions there may be <i>tracheal deviation</i> away from the effusion. Look for aspiration marks and signs of associated disease: malignancy (cachexia, clubbing, lymphadenopathy, radiation marks, mastectomy scar); stigmata of chronic liver disease; cardiac failure; hypothyroidism; rheumatoid arthritis; butterfly rash of SLE.</p>
KEY	The key is A. Tension pneumothorax.
Additional Information	<p><u>Penetrating Chest Injuries-</u></p> <p><u>Most common – hemopneumothorax</u></p> <p><u>Large chest drain (32G)</u></p> <p><u>Drainage &gt; 1500 ml or &gt; 300 ml /hr- Thoracotomy is needed</u></p> <p><u>Anterior wound medial to nipple line and posterior wound medial to scapulae – think of thoracotomy</u></p> <p><u>Sucking wound – close with Vaseline gauze pad on three sides (( flutter valve)</u></p> <p><u>Complete seal on chest drain insertion</u></p> <p><u>Tension Pneumothorax- relieve with needling before chest drain or X ray</u></p> <p><u>Prophylactic antibiotics indicated</u></p> <p><u>SIGN/SYMPTOMS-</u></p> <p><u>PNEUMOTHORAX</u></p> <p><u>TRACHEA DISPLACES AWAY/TOWARDS</u></p> <p><u>HYPERRESONANT PERCUSSION SOUND</u></p> <p><u>DIMINISHED BREATH SOUNDS</u></p> <p><u>PNEUMOTHORAX CLICK – LEFT SIDE DURING SYSTOLE</u></p>

54 The respiratory system: important presentations



With a tension pneumothorax, the trachea will be deviated away from the affected side 182 OHCM

1

Dr Khalid/Rabia

Q: 162

A 20yo man has a head on collision in a car. On presentation his is breathless, has chest pain and fx of 5-7th rib. CXR confirms this. What is the most appropriate initial action in this pt?

- Antibiotics
- Analgesia
- O2 by mask
- Physiotherapy
- Refer to surgeon

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Clincher(s)	
A	
B	
C	
D	
E	
KEY	The key is C. O2 by mask.
Additional Information	<p><b>BLUNT CHEST INJURY- 724 OHCS</b></p> <ul style="list-style-type: none"> <li>• If breathing spontaneously- give all patients O2 at 15 L/min through tight fitting mask with reservoir</li> <li>• Quality of breathing- stridor +/- voice change = sternoclavicular fracture</li> <li>• Cover and seal open chest wounds on three sides</li> <li>• Assume Spinal instability- Keep neck immobile</li> <li>• Tension Pneumothorax ???- Assess. And manage ( neck vein distended, breath sounds diminished, resp distress, tracheal deviation, Cyanosis, assymetric appearance of chest</li> <li>• Hge control and fluid resuscitation , SBP&lt; 90, and hge is the cause- 2 l of warmed crystalloids until BP raises or urine flows.</li> <li>• Decreased BP and increased JVP , quiet heart sounds= cardiac tamponade</li> <li>• Level of consciousness-             <ol style="list-style-type: none"> <li>1. Fits- &lt;8 mg lorazepam, 4 mg as slow bolus, or buccal midazolam.</li> <li>2. Pupil unequal – summon neurological help, 20% mannitol</li> <li>3. Check pupil size every few min</li> </ol> </li> <li>• Injury extent- remove clothes             <ol style="list-style-type: none"> <li>1. Circumferential burns – escharotomy – due to decreased laryngeal pressure</li> <li>2. Surgical Emphysema- Chest Drain</li> <li>3. FlailChest – intubate and ventilate</li> <li>4. Chart obs and time keeping</li> </ol> </li> <li>• ECG- ST and conduction problems, myocardial damage</li> <li>• Imaging- CXR , CERVICAL SPINE, PELVIS XRAY- CXR IMPLICATIONS             <ol style="list-style-type: none"> <li>1. FREE AIR- Thoracocentesis</li> <li>2. Persistent large pneumothorax after chest drain – suspect bronchial tear</li> <li>3. # ribs 1-3- ?airway/big vessel</li> <li>4. #ribs&gt;2 in 2 places = flail chest?</li> <li>5. CXR fluid levels- hemothorax</li> <li>6. Bowel gas in chest- Diaphragm injury</li> <li>7. # Sternum- ? myocardial contusion</li> <li>8. Respiratory distress + chest ok- aspiration</li> <li>9. Wide Mediastinum- Aortic rupture</li> <li>10. Deviation of esophagus = aortic rupture</li> <li>11. Ribs 9-12#- ? abdominal trauma</li> <li>12. CXR fluid level= hemothorax</li> </ol> </li> </ul>

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	<p>13. Diaphragm contour depressed- rupture  14. Liver raised- Diaphragmatic injury  15. Mediastinal air – Lung barotrauma  16. # scapula- airway injury  17. Tracheal deviation – aortic injury  18. No aortic knob- ruptured aorta  FAST- Focussed assesment with sonography for trauma</p> <ul style="list-style-type: none"> <li>• Secondary Survey <ol style="list-style-type: none"> <li>1. Head to toe exam</li> <li>2. Peripheral pulses</li> <li>3. Lung contusion – ventilate Sao2 &lt;90%</li> <li>4. TT booster-</li> <li>5. ABCDE</li> </ol> </li> <li>• PRIMARY SURVEY <ol style="list-style-type: none"> <li>1. A- AIRWAY--oxygen, spine( cervical) Talk to pt- spontaneous talk back- breathing compromise is unlikely</li> <li>2. B BREATHING + ventilation- air entry ( auscultate-chest, heart, inspect palpate percuss chest wall, check RR- chest trauma ( 722-4)</li> <li>3. C- CIRCULATION +hge control <ul style="list-style-type: none"> <li>- Check GCS/AVPU, skin perfusion, BP, pulse, pulse pressue narrows before BP drops</li> <li>- Estimate blood loss</li> <li>- Control hemorrhage</li> <li>- Get warmed 2 L RL running via two separate points.</li> </ul> </li> <li>4. D- DISABILITY check GCS pupillary reflexes, spinal injury</li> <li>5. E EXPOSURE check and maintain body temperature, completely undress patients.</li> <li>6. Hypothermia OHCM 860</li> </ol> </li> </ul>
Reference	
Dr Khalid/Rabia	<p>[There was debate in this forum that pain relief should be given first which will automatically relieve breathing problem. But others told O2 first].  O2 first is the correct answer!</p> <p>[<a href="http://www.urmc.rochester.edu/encyclopedia/content.aspx?contenttypeid=22&amp;contentid=failchest">http://www.urmc.rochester.edu/encyclopedia/content.aspx?contenttypeid=22&amp;contentid=failchest</a>]  ABCDE always comes first.</p>

Q: 169	<p>A 40yo man collapsed at home and died. The GPs report says he suffered from T2DM and BMI=35. What is the most likely cause of death?</p> <p>a. Myocardial Infarction b. Diabetes mellitus c. Heart failure d. Pulmonary embolism e. Renal failure</p>
Clincher(s)	
A	In diabetics MI become painless when the patient develop autonomic neuropathy (till there is no autonomic neuropathy diabetic patients will feel MI pain).
B	
C	
D	
E	
KEY	The key is A. MI.
Additional Information	<p>The most common preventable comorbidities associated with SCD include coronary artery disease (CAD), myocardial infarction (MI), and heart failure (HF).<sup>[1]</sup> Since diabetes is a risk factor for these comorbidities, it has been deemed to have an association with SCD. The association between diabetes and SCD may involve a combination of macrovascular and microvascular complications that can affect the electrical system controlling cardiac rhythm, thus increasing the propensity for SCD.<sup>[9,10]</sup> With the number of diabetes patients growing in epidemic proportions (approximately 29.9 million in the U.S.), there is an urgent need to determine whether having diabetes increases one's risk for SCD</p> <p align="center"><b>Silent Ischemia</b></p> <p>Silent ischemia is a painless condition in which narrowed or blocked arteries prevent oxygen-rich blood from reaching the heart. Diabetes patients, particularly those with CAN, are at increased risk for developing silent ischemia, which eventually may lead to SCD secondary to arrhythmias.<sup>[8,10]</sup> However, no studies clearly demonstrate the risk of SCD due to silent ischemia in patients with diabetes.</p> <p align="center"><b>QT-interval Prolongation</b></p> <p>The Rotterdam Heart Study and the Oregon Sudden Unexpected Death Study provided evidence that prolonged QT intervals heighten the risk of SCD in the general population.<sup>[1,4,5,18,19]</sup> QT-interval prolongation is common in diabetes, particularly in CAN patients, although the mechanism behind this association is</p>

	<p>unclear.<sup>[8,19]</sup> QT-interval prolongation has been indicated as an independent predictor of mortality and has been associated with a suspected increase in risk of SCD in diabetes patients; however, further research is necessary to determine the association between QT prolongation and SCD in patients with diabetes.<sup>[8,9]</sup></p> <p align="center"><b>HF</b></p> <p>Systolic dysfunction—particularly left ventricular ejection fraction (LVEF) below 30% to 35%—increases the risk of SCD in the general population, but little is known about the effect of diastolic dysfunction on SCD risk.<sup>[1,4,8]</sup> Patients with less severe HF are more likely to die from SCD, whereas those with more severe HF (i.e., New York Heart Association [NYHA] Class IV) are more likely to die from pump failure.<sup>[4,20]</sup> However, since the NYHA classification can rapidly fluctuate between Class I and Class IV, this approach only estimates functional consequences, so the usefulness of HF classification as a marker for risk of SCD is minimal. In a post hoc analysis of the Valsartan in Acute Myocardial Infarction Trial, LVEF was a strong predictor of SCD, which increased by 21% with every 5% reduction in ejection fraction.<sup>[20,21]</sup> Left ventricular systolic dysfunction is established as a strong predictor of SCD</p> <p>Based on autopsy reports, thrombus, plaque disruption, or both occur in more than 50% of SCD cases.<sup>[14]</sup> When stable atherosclerotic plaques fissure, platelet activation and aggregation occur, resulting in thrombosis.<sup>[14]</sup> Plaque rupture occurs more often in women, particularly those of advanced age.<sup>[14]</sup> Distribution of coronary artery lesions does not appear to play a substantial role in SCD development. However, acute thrombosis was observed two to three times more often in smokers than in nonsmokers, likely because of an increase in platelet adhesiveness.<sup>[14]</sup> SCD was much more likely to occur in current cigarette smokers, underscoring the importance of tobacco cessation. The increased risk of SCD development in diabetes patients through early coronary atherosclerosis and thrombosis appears to be theoretica</p>
Reference	
Dr Khalid/Rabia	<p>In this case the disease was unnoticed as it was a painless attack. It is one of the complications of Diabetes.</p> <p>Vascular disease - Chief cause of death. MI is 4-fold commoner in DM and is more likely to be 'silent'. Stroke is twice as common. Women are at high risk.</p> <p>Address other risk factors—diet, smoking, hypertension. Suggest a statin (eg simvastatin 40mg nocte) for all, even if no overt IHD, vascular disease or microalbuminuria.</p> <p>Fibrates are useful for triglycerides and reduced HDL. Aspirin 75mg reduces vascular events (if past stroke or MI) and is good as statin co-therapy (safe to use in diabetic retinopathy; use in primary prevention is disappointing, at least at 100 mg/day.</p>

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Q: 184	A 30yo man presents with deep penetrating knife wound. He said he had TT when he left school. What will you do for him now? a. Human Ig only b. Human Ig and TT c. Full course of tetanus vaccine only d. Human Ig and full course of tetanus vaccine e. Antibiotic
Clincher(s)	
A	Correct answer
B	
C	
D	
E	
KEY	The key is B (immunization needed every 5 years- and deep penetrating wound)
Additional Information	<u>730 OHCS</u> <u>VACCINATE THOSE WHO DON'T KNOW THE STATUS OR HAVE INCOMPLETE IMMUNIZATION</u> <u>IMMUNOGLOBULIN FOR THOSE WHO HAVE DIRTY WOUND, CONTACT WITH MANURE OR NECROSIS.</u> <u>VACCINE AND IG IN DIFFERENT ARMS</u>  <u>? C</u>
Reference	<a href="http://www.nhs.uk/conditions/tetanus/pages/introduction.aspx#vaccination">http://www.nhs.uk/conditions/tetanus/pages/introduction.aspx#vaccination</a>
Dr Khalid/Rabia	

Q: 187	A 19yo boy complains of itching on the site of insect bite. What is the single most appropriate management? a. Penicillin oral b. Doxycycline oral c. Oral antihistamine d. Oral ciprofloxacin e. Reassurance
Clincher(s)	
A	
B	
C	
D	



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E	
KEY	Ans. The key is C. Oral antihistamine.
Additional Information	
Reference	
Dr Khalid/Rabia	

Q: 189	A young footballer has collapsed during a game. During initial evaluation: RR=14/min, pulse=88bpm, BP=110/70mmHg. He seems to be sweating and muttering some incomprehensible words. What is the most imp next step? a. CT b. MRI c. Blood sugar d. Body temp e. IV fluids
Clincher(s)	
A	
B	
C	diagnosis is hypoglycaemia.
D	
E	
KEY	C
Additional Information	
Reference	
Dr Khalid/Rabia	During exercise glucose utilization also increased which may precipitate hypoglycaemia and in diabetic strenuous exercise may cause low blood glucose which effect is lasting for next 24 hours.  We don't know whether diabetic or not! That is why we shall take no risk and do the simplest test blood sugar and if it reveals hypoglycaemia we can save life

Q: 195	A 16yo girl is admitted after taking a paracetamol OD 4 h ago. She has consumed large amounts of alcohol. Her plasma paracetamol conc is just below the conc that would suggest tx. What should be the tx option for her? a. Refer to psychiatry ward b. Refer to medical ward c. N-acetylcystine d. Serum plasma paracetamol e. No further investigation
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Clincher(s)	
A	
B	
C	
D	
E	
KEY	The key is A. Refer to psychiatry ward.
Additional Information	
Reference	
Dr Khalid/Rabia	<p>Chronic alcohol consumption is an inducer of P-450 enzyme system while acute alcohol consumption is inhibitor. Since this lady has consumed large amounts of alcohol recently (acute) the risk of fatal effects of paracetamol poisoning will be reduced. And all such patients should be referred to the psych ward.</p> <p>PARACETAMOL POISONING: &gt;150mg/kg or 12 total PRESENTATION: Hepatic damage shown by deranged LFTs occurs after 24hrs. Patients may develop enceph, hypoglycemia, ARF</p> <p>INVESTIGATIONS: Paracetamol levels: 4hrs post ingestion, if time is &gt;4hr or staggered overdose Any alcohol taken (acute alcohol ingestion will inhibit liver enzymes and may reduce the production of the toxin NAPQI, whereas chronic alcoholism may increase it)</p> <p>MANAGEMENT:</p> <ul style="list-style-type: none"> <li>· If presentation is within the first hour give activated charcoal</li> <li>· All patients who have a timed plasma paracetamol level plotted on or above the line drawn between 100 mg/L at 4 hours and 15 mg/L at 15 hours after ingestion, should receive acetylcysteine.</li> <li>· If time unknown (even in staggered dose) give N-Acetyl cysteine without delay</li> <li>· NAC most effective in the first 8 hrs.</li> <li>· NAC can be given during pregnancy</li> <li>· Beware if the patient is on any P450 enzyme inducer medicines as they increase the toxicity</li> <li>· Refer to ICU if there is fulminant liver failure - those treated with N-acetylcysteine (NAC) to the medical team and all para-suicides to the psychiatric team.</li> </ul>

Q:	
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Clincher(s)	
A	
B	
C	
D	
E	
KEY	
Additional Information	
Reference	
Dr Khalid/Rabia	

<b>Q: 1422</b>	<p>A 38yo woman is in the ED following an OD of her meds. She doesn't need med tx for the OD. She says she wishes to be discharged. What is the single most appropriate management?</p> <p>a. Community psychiatric nurse visit</p> <p>b. Psychiatric OPD review the next day</p> <p>c. Prescribe anti-depressants</p> <p>d. Admission under the mental health act.</p> <p>e. Discharge and allow to go home</p>
<b>Clincher(s)</b>	<b>Overdosage and treatment refusal. High index on suicide risk assessment.</b>
A	
B	
C	
D	
E	
<b>KEY</b>	<b>D- Admission under the mental health act.</b>

<p>Additional Information</p>	<div> <div>400</div> <div> <b>Compulsory hospitalization</b> <span>(for 2007 law, see p398)</span> </div> </div> <div> <b>Provisions under the 1983 Act (in England)</b> <p>▶ The patient must have a mental disorder and need detention for treatment of it, or to protect himself or others, before compulsion may be used (if voluntary means have failed).</p> <p><b>Admission for assessment (Mental Health Act<sup>1</sup> 1983, section 2)</b></p> <ul style="list-style-type: none"> <li>• The period of assessment (and treatment) lapses after 28 days.</li> <li>• Patient's appeals must be sent within 14 days to the Mental Health Tribunal (composed of a doctor, lay person, and lawyer).</li> <li>• An approved social worker (or the nearest relative) makes the application on the recommendation of 2 doctors (not from the same hospital), one of whom is 'approved' under the Act (in practice a psychiatric consultant or senior registrar). The other doctor should ideally know the patient in a professional capacity. If this is not possible, the Code of Practice recommends that the second doctor should be an 'approved' doctor.</li> </ul> <p><b>Section 3: admission for treatment (for ≤6 months)</b></p> <ul style="list-style-type: none"> <li>• The exact mental disorder must be stated.</li> <li>• Detention is renewable for a further 6 months (annually thereafter).</li> <li>• 2 doctors must sign the appropriate forms and know why treatment in the community is contraindicated. They must have seen the patient within 24h. They must state that treatment is likely to benefit the patient, or prevent deterioration; or that it is necessary for the health or safety of the patient or the protection of others.</li> </ul> <p><b>Section 4: emergency treatment (for ≤72h)</b></p> <ul style="list-style-type: none"> <li>• The admission to hospital must be an urgent necessity.</li> <li>• May be used if admission under section 2 would cause undesirable delay (admission must follow the recommendation rapidly).</li> <li>• An approved social worker or the nearest relative makes the application after recommendation from one doctor (eg the GP).</li> <li>• The GP should keep a supply of the relevant forms, as the social worker may be unobtainable (eg with another emergency).</li> <li>• It is usually converted to a section 2 on arrival in hospital, following the recommendation of the duty psychiatrist. If the second recommendation is not completed, the patient should be discharged as soon as the decision not to is made. The Section should not be allowed to lapse.</li> </ul> <p><b>Detention of a patient already in hospital: section 5(2) (≤72h)</b></p> <ul style="list-style-type: none"> <li>• The doctor in charge (or, if a consultant psychiatrist, his or her deputy, applies to the hospital administrator, day or night.</li> <li>• A patient in an A&amp;E department is not in a ward, so cannot be detained under this section. Common law is all that is available, to provide temporary restraint 'on a lunatic who has run amok and is a manifest danger either to himself or to others'<sup>512</sup> while awaiting an assessment by a psychiatrist.<sup>513</sup></li> <li>• Plan where the patient is to go before the 72h has elapsed, eg by liaising with psychiatrists for admission under section 2.</li> </ul> <p><b>Nurses' holding powers: section 5(4) (for ≤6h)</b></p> <ul style="list-style-type: none"> <li>• Any authorized psychiatric nurse may forcibly detain a voluntary 'mental' patient who is taking his own discharge against advice, if such a discharge would be likely to involve serious harm to the patient (eg suicide) or others.</li> <li>• During the 6h the nurse must find the necessary personnel to sign a section 5 application or allow the patient's discharge.</li> </ul> </div>
<p>Reference</p>	
<p>Dr Khalid/Rabia</p>	

<p><b>Q: 1424</b></p>	<p>A 70yo lady on Raloxifene for osteoporosis has recently to the UK from</p>
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	<p>Australia. She now presents with severe chest pain, SOB and suddenly collapsed in the ED. What is the single most appropriate dx?</p> <p>a. MI</p> <p>b. Aortic dissection</p> <p>c. Pulmonary embolism</p> <p>d. Costochondritis</p> <p>e. Pneumothorax</p>				
<b>Clincher(s)</b>	<b>h/o travel, sudden chest pain, SOB, HRT therapy.</b>				
A					
B					
C					
D					
E					
<b>KEY</b>	<b>C- Pulmonary embolism</b>				
Additional Information	<p><b>PULMONARY EMBOLISM</b>  Always suspect pulmonary embolism (PE) in sudden collapse 1–2wks after surgery.</p> <p>Mechanism= Venous thrombi, usually from DVT, pass into the pulmonary circulation and block blood flow to lungs. The source is often occult.</p> <p>Risk factors</p> <ul style="list-style-type: none"> <li>• Malignancy.</li> <li>• Surgery—especially pelvic and lower limb (much lower if prophylaxis used).</li> <li>• Immobility.</li> <li>• Combined oral contraceptive pill (there is also a slight risk attached to HRT).</li> <li>• Previous thromboembolism and inherited thrombophilia.</li> </ul> <p>Signs and symptoms</p> <ul style="list-style-type: none"> <li>• Acute dyspnoea, pleuritic chest pain, haemoptysis, and syncope.</li> <li>• Hypotension, tachycardia, gallop rhythm, JVP, loud P2, right ventricular heave, pleural rub, tachypnoea, cyanosis, AF.</li> </ul> <p>Investigation: (2012 NICE guidelines)</p> <p>All patients with symptoms or signs suggestive of a PE should have a history taken, examination performed and a chest x-ray to exclude other pathology.</p> <p>If a PE is still suspected a two-level PE Wells score should be performed:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Clinical feature</th><th style="text-align: center;">Points</th></tr> </thead> <tbody> <tr> <td>Clinical signs and symptoms of DVT (minimum of leg swelling and pain with palpation of the deep veins)</td><td style="text-align: center;">3</td></tr> </tbody> </table>	Clinical feature	Points	Clinical signs and symptoms of DVT (minimum of leg swelling and pain with palpation of the deep veins)	3
Clinical feature	Points				
Clinical signs and symptoms of DVT (minimum of leg swelling and pain with palpation of the deep veins)	3				

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	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">An alternative diagnosis is less likely than PE</td><td style="text-align: center; padding: 5px;">3</td></tr> <tr> <td style="padding: 5px;">Heart rate &gt; 100 beats per minute</td><td style="text-align: center; padding: 5px;">1.5</td></tr> <tr> <td style="padding: 5px;">Immobilisation for more than 3 days or surgery in the previous 4 weeks</td><td style="text-align: center; padding: 5px;">1.5</td></tr> <tr> <td style="padding: 5px;">Previous DVT/PE</td><td style="text-align: center; padding: 5px;">1.5</td></tr> <tr> <td style="padding: 5px;">Haemoptysis</td><td style="text-align: center; padding: 5px;">1</td></tr> <tr> <td style="padding: 5px;">Malignancy (on treatment, treated in the last 6 months, or palliative)</td><td style="text-align: center; padding: 5px;">1</td></tr> </table> <p>Clinical probability simplified scores</p> <ul style="list-style-type: none"> <li>• PE likely - more than 4 points</li> <li>• PE unlikely - 4 points or less</li> </ul> <p>If a PE is 'likely' (more than 4 points) = immediate computed tomography pulmonary angiogram (CTPA).          If there is a delay in getting the CTPA = give low-molecular weight heparin until the scan is performed.</p> <p>If a PE is 'unlikely' (4 points or less) = D-dimer test.          If this is positive= immediate computed tomography pulmonary angiogram (CTPA).          If there is a delay in getting the CTPA= give low-molecular weight heparin until the scan is performed.</p> <p>If the patient has an allergy to contrast media or renal impairment a V/Q scan should be used instead of a CTPA.</p> <p><b>Management:</b> (NICE guidelines)          Low molecular weight heparin (LMWH) or fondaparinux should be given initially after a PE is diagnosed (except in massive PE)          a vitamin K antagonist (i.e. warfarin) should be given within 24 hours of the diagnosis.          Low molecular weight heparin (LMWH)= upto 5 days or until INR &gt;2.          warfarin should be continued for at least 3 months.          NICE advise extending warfarin beyond 3 months for patients with <i>unprovoked</i> PE. This essentially means that if there was no obvious cause or provoking factor (surgery, trauma, significant immobility) it may imply the patient has a tendency to thrombosis and should be given treatment longer than the norm of 3 months</p> <p>for patients with active cancer NICE recommend using LMWH for 6 months.  <u>Thrombolysis</u> is now recommended as the first-line treatment for massive PE where there is circulatory failure (e.g. hypotension).</p>	An alternative diagnosis is less likely than PE	3	Heart rate > 100 beats per minute	1.5	Immobilisation for more than 3 days or surgery in the previous 4 weeks	1.5	Previous DVT/PE	1.5	Haemoptysis	1	Malignancy (on treatment, treated in the last 6 months, or palliative)	1
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Dr Khalid/Rabia													

<b>Q: 1529</b>	<p>A man brings his wife into the ED after finding her unconscious at home. He says at breakfast time she had complained of sudden severe headache. What is the most appropriate inv?</p> <p>a. MRI</p>
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	b. XR c. CT brain d. Carotid Doppler
<b>Clincher(s)</b>	<b>Sudden severe headache and unconscious.</b>
A	
B	
C	
D	
E	
<b>KEY</b>	<b>C- CT brain (SAH)</b>
Additional Information	
<b>Reference</b>	
Dr Khalid/Rabia	

<b>Q: 1533</b>	A man with DM comes to the ED after he collapsed at home. His GCS=10. What should be the next initial inv for this man?  a. Capillary blood sugar b. MRI head c. CT head d. Serum electrolytes
<b>Clincher(s)</b>	<b>Diabetic and GCS 10</b>
A	
B	
C	
D	
E	
<b>KEY</b>	<b>A- Capillary blood sugar.</b>
Additional Information	
<b>Reference</b>	
Dr Khalid/Rabia	

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<b>Q: 1576</b>	<p>A 30yo woman has injured her left lower chest in a RTA. She has BP=80/50 mmHg, Pulse= 120 bpm. Auscultation of chest= bowel sounds present. What is the single most likely dx?</p> <p>a. Diaphragmatic rupture</p> <p>b. Flail chest</p> <p>c. Fractured ribs</p> <p>d. Ruptured oesophagus</p> <p>e. Tension pneumothorax</p>
<b>Clincher(s)</b>	<b>Trauma to chest and bowel sounds in the chest.</b>
A	
B	
C	
D	
E	
<b>KEY</b>	<b>A- Diaphragmatic rupture.</b>
Additional Information	
<b>Reference</b>	
Dr Khalid/Rabia	

<b>Q: 1638</b>	<p>A 78yo man has collapsed. He has had a severe headache for 12 hours and had an URTI 3d ago. He has a temp=39.2C, pulse=122bpm, BP=84/60mmHg and RR=34bpm but his chest is clear. He has a GCS=10 and some neck stiffness. He has been started on high-flow oxygen. What is the SINGLE most appropriate immediate management?</p> <p>a. IV antibiotic; CT brain scan</p> <p>b. IV antibiotic; LP</p> <p>c. IV fluids; CT brain scan</p> <p>d. IV fluids; IV antibiotic</p> <p>e. IV fluids; LP</p>
<b>Clincher(s)</b>	<b>Upper respiratory tract infection, neck stiffness, low blood pressure</b>
A	



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B	
C	
D	
E	
<b>KEY</b>	<b>D- IV fluids; IV antibiotic. Patient is suffering from meningitis along with hypotension.</b>
Additional Information	
<b>Reference</b>	
Dr Khalid/Rabia	

<b>Q: 1639</b>	<p>A 16yo boy was brought to hospital in a comatose state having taken methadone belonging to his sister. He was given naloxone and rapidly became alert. Some hours later, he gradually becomes semi-conscious again. What is the SINGLE most likely reason for this patient becoming semi-conscious again in hospital?</p> <p>a. Methadone hepatotoxicity has caused acute liver failure</p> <p>b. Methadone is eliminated from the body more slowly than naloxone</p> <p>c. Naloxone is a partial agonist at the central nervous system opioid receptor</p> <p>d. The pt has misused another substance that has caused an intracranial bleed</p> <p>e. The pt has misused another substance that is absorbed more slowly than methadone</p>
<b>Clincher(s)</b>	<b>Methadone toxicity and antidote given.</b>
A	
B	Methadone has longer half life than naloxone.
C	
D	
E	
<b>KEY</b>	<b>B- Methadone is eliminated from body slower than naxlozone.</b>
Additional Information	Methadone (is an weak opioid and has a partial agonist effect) caused respiratory depression.
<b>Reference</b>	
Dr Khalid/Rabia	

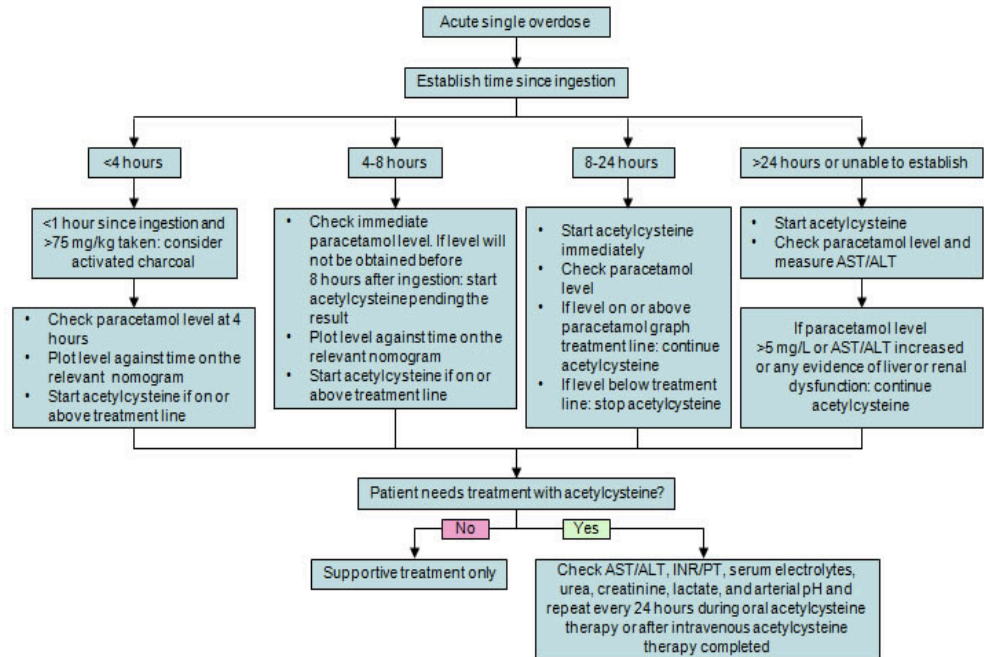
<b>Q: 1705</b>	A 22yo says she has taken about 40 tabs of paracetamol 3h ago. Her HR=110bpm, BP=110/80mmHg and RR=22bpm. What's the initial
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	<p>management?</p> <p>a. Activated charcoal</p> <p>b. N-acetyl cysteine</p> <p>c. Gastric lavage</p> <p>d. Wait for 4h paracetamol level</p>
<b>Clincher(s)</b>	<b>Paracetamol poisoning less than 4h.</b>
A	
B	
C	
D	
E	
<b>KEY</b>	<b>B, more than &gt;24 tablets</b>
<b>Additional Information</b>	<p><b>PLAB CASE 2:</b> A patient presented within 4 hour of ingestion of paracetamol fatal dose(150mg/ 12g). What is the management plan?</p> <ol style="list-style-type: none"> <li>1- General measures.</li> <li>2- Give activated charcoal immediately.</li> <li>3- Serum blood glucose, BUE, LFT, INR, FBC, HCO<sub>3</sub>.</li> <li>4- Wait for 4h, then send blood for paracetomal level.</li> </ol>
<b>Reference</b>	
From massive skype discussion ☺	<p>If we know dosage of poisoning and about a defined period, before 4 hr either gastric lavage/decontamination with activated charcoal (less than 1 hr) or activated charcoal- Rx of choice (within 4 hrs), if tabs taken above 24 tabs go for gastric lavage. After 4 hrs: N acetyle cystine- if time of ingestion not known. Serum Paracetamol done after 4 hrs of ingestion.</p> <p>Summary:</p> <p>In children: charcoal &lt;1 h and till 4 hr in adults. (in kids, after 1 hr do serum paracetamol and then give N acetyle cysteine if needed)</p> <p>In adults, at 4 hr= serum paracetamol (if 100mg or more then N acetyle cysteine)</p> <p>if level less than 100= just monitor LFT/PH</p> <p><a href="http://bestpractice.bmj.com/best-practice/monograph/337/treatment/step-">http://bestpractice.bmj.com/best-practice/monograph/337/treatment/step-</a></p>

[by-step.html](#) (chart below)



**Q: 1706**

A 35yo man skidded on a wet road while riding his motorbike at a speed of 70mph. He has a large hematoma on temporal scalp, some bruises on chest wall and abdomen and a deformed thigh. GCS 11/15. High flow oxygen via mask given. Most immediate radiological inv required during initial resuscitation phase?

- CXR
- CT brain
- CT abdomen
- XR femur

**Clincher(s)**

**Head heamatoma and chest bruises, multiple trauma.**

A

B

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C	
D	
E	
<b>KEY</b>	<b>A- CXR</b>
Additional Information	<b><u>Every patient with multiple trauma should be dealt properly ruling out most fatal injury at first. In this case, there is suspicion of pneumothorax/hemothorax. Therefore, before sending for CT scan brain, do emergency CXR.</u></b>
<b>Reference</b>	
Dr Khalid/Rabia	Low GCS could be due to hypovolemia

<b>Q:</b>	
<b>Clincher(s)</b>	
A	
B	
C	
D	
E	
<b>KEY</b>	
Additional Information	
<b>Reference</b>	
Dr Khalid/Rabia	