

- PEP regimen – preferred regimen in adults is tenofovir(TDF) + lamivudine(3TC) + lopinavir/ritonavir(LPV/r) in standard doses; healthcare workers with occupational exposure who cannot tolerate LPV/r can be given 2 drugs (TDF+ 3TC) and AZT can be used instead of TDF
- Duration of PEP is 28 days
- Follow-up HIV testing at 3 and 6 months after exposure
- Continued counseling and support

Acute bacterial meningitis

- Stabilize airway, breathing, circulation
- **Empiric antibiotic therapy, IV, high dose** – Vancomycin plus cefotaxime or ceftriaxone started after CSF sample obtained, change antibiotics based on culture results
- **Adjunctive steroids - dexamethasone** 10 mg IV before or with the first dose of antibiotic therapy and continue dexamethasone 10 mg 6-hourly IV for 4 days if CSF shows gram-positive diplococci, or if blood/CSF cultures are positive for Streptococcus pneumoniae
- In patients with septic shock, give low-dose steroid (hydrocortisone 50 mg 6-hourly IV + fludrocortisone 50 µg daily IV)
- Fluid balance
- Monitor CVP and urine output if patient is oliguric or if plasma creatinine is $>200 \mu\text{mol/l}$
- DVT prophylaxis with stockings and LWH heparin
- Prophylaxis against gastric stress ulceration with PPIs
- Fits - Prophylactic anticonvulsant therapy not indicated

Acute dysentery

- **Adequate fluid and electrolyte** replacement and maintenance
- None to moderate hypovolemia, treat with oral rehydration salts (ORS)
- Severe hypovolemia — intravenous fluids Ringer's lactate or Ringer's lactate with 5 percent dextrose are preferred, but normal saline can also be used. Normal saline is less preferable because it does not contain potassium to replace losses nor a base to correct acidosis.
- **Antibiotic therapy** - promptly with an antimicrobial that is effective against Shigellae **ciprofloxacin**; antibiotics reduce the duration of diarrhea and fever in infections caused by Shigella; If amebic dysentery due to E. histolytica is suspected based on stool microscopy, **metronidazole** is the usual treatment
- Continuous provision of nutritious food; small meals provided frequently, as soon as the patient is able to tolerate

Diabetic ketoacidosis

- **Admit to intensive care unit** or high-dependency unit; monitor BP, CVP and urine output monitoring
- **Fluid resuscitation**
- **Reduction in the plasma glucose concentration to normal**
- **Replenishment of electrolyte losses - potassium**
- Identification and treatment of the underlying cause

Acute hepatic failure

- **Monitoring and general care**
 - Head up
 - GCS check, if low - intubate
 - RBS checks
 - O₂
 - FFP, correct coagulopathy
- **Manage complications**
- **Cerebral edema-** Give mannitol
- **Hypotension-** Correct hypovolemia with blood or 4.5% human albumin solution;
- **Oliguria/renal failure-** Correct hypovolemia
- **Hypoglycemia-** Give glucose 10%
- **Coagulopathy-** Give vitamin K 10 mg IV daily; platelet transfusion if count $<50 \times 10^9/L$; fresh frozen plasma only if there is active bleeding
- **Gastric stress Prophylaxis**
- **Infection-** Daily culture of blood, sputum and urine; Early treatment of presumed infection with broad-spectrum antibiotic therapy; discuss with microbiologist; Consider antifungal therapy if fever with negative blood cultures

You have 7.5 min.

① Interpret ~~the~~ CXR of this patient

② Tell us the findings

③ What clinical diagnosis is suggested by your radiological findings

④ What additional history would you like to obtain from the patient

⑤ Name 1 additional investigation you would like to carry out and why?

3
VIVA MARKING SCHEME

Thyrotoxic storm

- Supportive
 - ABC's
 - Manage fever, hydration
- Consult Endocrinologist early
- Start antithyroid treatment
 - PTU or Carbomazole
 - Dexamethasone – to inhibit hormone release from the thyroid and reduce the peripheral conversion of thyroxine to tri-iodothyronine
- Treat heart failure
- Start beta-blockade- If there is no pulmonary edema
- Thromboprophylaxis

Warfarin overdose

- If INR is > 1.5 with major bleeding or rapid reversal for surgery is needed
 - Stop warfarin
 - Give vitamin K 5 mg IV
 - If there is life-threatening bleeding (e.g. intracranial hemorrhage), give vitamin K 10 mg IV plus prothrombin complex concentrate 50 IU/kg IV
 - Recheck INR after 4 h
 - In other circumstances, give fresh frozen plasma 1 L (15 ml/kg) IV; repeat 6-hourly until INR is < 1.5 and bleeding has stopped
 - Discuss management with a hematologist
- If INR is > 8 with no bleeding or minor bleeding
 - Stop warfarin
 - If there is minor bleeding or if INR is > 15 (> 12 in patients over 70), and there is no mechanical prosthetic valve give vitamin K 0.5 mg IV plus fresh frozen plasma 1 L IV
 - If the patient is at increased risk of bleeding or if INR is 12–15 in patients under 70, give vitamin K 0.5 mg IV
 - Repeat dose of vitamin K if INR remains > 5 after 24 h
 - Discuss management with a Hematologist
- If INR is 6–8 with no bleeding or minor bleeding
 - Stop warfarin; restart when INR is < 5
- If INR is < 6 but > 0.5 units above the target value with no bleeding
 - Reduce dose or stop warfarin; restart when INR is < 5

Sickle cell painful crisis

- Consult hematologist
- Relieve the pain
- Prevent/ treat hypoxemia
- Prevent / treat dehydration
- Exclude/ treat infection
- Physiotherapy
- Blood transfusion

Acute blood transfusion reaction

- Stop the transfusion, but leave the intravenous line attached
- The bag containing the transfused blood or packed cells, along with all attached labels, should not be discarded, as repeat typing and cross-matching of this unit by the blood bank will be required
- Maintain the patient's airway, blood pressure, and heart rate
- Begin an infusion of normal saline immediately to initiate a diuresis and avoid hypotension
 - Avoid the use of Ringer's lactate solution; its content of calcium may initiate clotting of any blood remaining in the intravenous line
 - Avoid dextrose-containing solutions; the dextrose may hemolyze any of the remaining red cells in the line
- From the other arm, obtain a sample for a direct antiglobulin test, plasma free hemoglobin, and repeat blood typing and cross-match; Obtain a urine sample for hemoglobin testing
- Alert the blood bank immediately, and a search for clerical error should be instituted
- If there is any suggestion that an acute hemolytic transfusion reaction (AHTR) has occurred (eg, clerical mistake, hypotension, pink plasma or urine), men generous fluid replacement with saline (100 to 200 mL/hour) to

You have 10 minutes

- ① Examine the precordium of this patient
- ② Tell us your findings
- ③ What is the clinical diagnosis suggested by your findings?
- ④ What 2 investigations would you carry out to confirm your clinical diagnosis?

You have 10 minutes

- ① Examine the **posterior** chest of this patient
- ② Tell us your findings
- ③ What is the clinical diagnosis suggested by your findings? ~~07334732~~ ~~949~~
- ④ What are the 2 likely aetiological causes for your clinical diagnosis
- ⑤ Name 2 priority investigations to establish
 - ① Clinical diagnosis
 - ② aetiological cause

You have 10 minutes

- ① Examine the abdomen of this patient.
- ② Tell us your findings
- ③ What is the clinical diagnosis suggested by your findings
- ④ What are 2 likely aetiological causes for your clinical diagnosis?
- ⑤ Name 2 priority investigations to establish
 - ① Clinical diagnosis
 - ② Aetiological Cause

You have 10 minutes

① Perform a general exam in this patient

② Tell us your findings

③ What is the likely underlying aetiology to explain all the findings in your patient (unifying diagnosis)?

④ Name 2 investigations you would carry out.

You have 10 minutes

① Examine the anterior chest of this patient

② Tell us your findings

③ What is the clinical diagnosis?

④ What are the 2 likely aetiological causes for your clinical diagnosis

⑤ Name 2 priority investigations to establish ① clinical diagnosis
② aetiological cause

You have 10 minutes

① Obtain, relevant, focused, history from this patient.

② What is the most likely diagnosis suggested by the history you have obtained?

③ Name 2 anatomical areas you would like to examine to assist in your diagnostic formulation?

You have 10 minutes

- ① Obtain ~~at a~~ ^{careful} ~~history~~ from this patient
(with a clinical sign shown)
- ② What diagnosis is suggested
by the history you have obtained
(and the clinical sign shown)?
- ③ Name 2 anatomical areas
you would like to examine
and what you would examine
- ④ Name 2 investigations
that would be useful in
evaluating the patient
and the expected findings from
each

You have 10 minutes

- ① Examine the venous pulsations in the neck of this patient
- ② Tell us your findings.
- ③ Determine the level of the Jugular Venous Pressure (JVP)
- ④ Tell us your findings.
- ⑤ Is there any abnormality in the JVP obtained in (3) above?

You have 7.5 min.

① Interpret ~~the~~ CXR of this patient

② Tell us the findings

③ What Clinical diagnosis is suggested by your radiological findings

④ What additional history would you like to obtain from the patient

⑤ Name 1 additional investigation you would like to carry out and why?

You have 10 minutes.

- ① Examine the praecordium of this patient.
- ② Tell us your findings.
- ③ What is the significance of each of your findings above?
- ④ What clinical diagnosis is suggested by your findings?
- ④ What is the underlying cause ~~to expect~~ for your clinical diagnosis in (4)?
- ⑤ Name 2 priority investigations you would carry out and the expected finding from each.

①

10 mins

1. EXAMINE THE
ANTERIOR CHEST

2. State your
findings

3. 2 possible causes

4. 2 Priority Ix

④ The patient presents with (swelling) abdominal complaints. He has a history of heavy alcohol intake.

- 1) Do the relevant general exam
- 2) Inspect the abdomen and elicit ascites
- 3) What is your Dx
- 4) 2 priority investigations

Examine the abdomen²
of this patient

State your findings

Give 2 DDx

What 3 priority tests

would do