



Submedicine Mini-Osce

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Forensic Medicine

Death and post mortem changes

1) Look at this picture carefully then, answer the following questions? **(MINI OSCE 017+019)**



A) What is the name of this postmortem change?

Hypostasis (livor mortis)

B) True or false: hypostasis gives a hint about the cause of death?

True

C) True or false: hypostasis gives a hint about the toxin we will find in the blood?

True in case of CO poisoning or cyanide

D) What is the name of the whitish areas?

Contact pallor

2) Look at this picture carefully then, answer the following questions? (MINI OSCE 017+018)



lividity \
post
mortem
staining\
hypostatisis

A) What is the name of this sign?

Livor mortis

B) What is the cause of (A) in the picture?

Pressure (c...)

C) Does this sign completely absent in RTA?

If severe bleeding occurs then yes

D) Does the victim died in supine position?

Yes

3) Look at this picture carefully then, answer the following questions? (MINI OSCE 018+019)



A) What do you see?

Marbling

B) True or false: it needs at least 48 hours to appear?

True

C) True or false: first place to appear is on the left iliac fossa?

False

D) Name 2 other signs that are considered a definite sign of death?

Mummification, rigor mortis, hypostasis

4) Look at this picture carefully then, answer the following questions? (MINI OSCE 018)



A) What is this?

Mummification

B) in what conditions this occurs?

~~Dry~~ and warm hot and dry

C) Is it seen after 7 days?

No, it needs 3-12 months

5) Look at these pictures carefully then, answer the following questions? (MINI OSCE 017+018)



A) The pale areas are caused by:

Cyanosis (pressure)

B) Rigor mortis is caused by muscle dehydration:

False

C) Rigor mortis develops faster in:

Electrocution Drowning, epilepsy and activity prior to death

D) 1 difference between a contusion and livor mortis?

Regular margins in livor mortis, irregular in contusions

Raised surface in
contusion
when you make an
incision blood will come
out in livor mortis in
contusion the blood is in
the tissues
location : livor in the
dependent areas \
contusion anywhere

6) Look at this picture carefully then, answer the following questions? (MINI OSCE 017)



A) True or False:

1) The condition is caused by ATP depletion?

False it is caused by pooling of blood in the dependent areas due to gravity

2) This sign helps in knowing the position that the person died in?

True

3) If the body position is changed after 10 hours, there will be overlap in postmortem staining?

False it is fixed after 8-10 hours

4) If an incision is done over the area of hypostasis, the blood can be washed away?

True the blood is in the vessels and not clotted

5) This starts 2 hours after death?

False (it starts immediately after death but it starts to appear to our eyes after 2 hours)

B) What is the cause of pallor in the circled area?

Due to contact with flat surface pressure

7) Look at this picture carefully then, answer the following questions? (MINI OSCE 017)



A) What is the name of the finding in the picture

Marbling

B) What is the first thing that can be seen in this stage

Greenish discoloration at RIF

C) Mention 2 scenarios which do not pass through this finding

Death in dry environment, severe bleeding

D) Mention other 2 sure postmortem changes

livor mortis, rigor mortis

8) Look at this picture carefully then, answer the following questions? (MINI OSCE 018)



this is a photo
of cadaveric
spasm not
rigor mortis
same
answers
apply

True or False:

A) This postmortem change starts with large muscle group?

False

B) If this postmortem change happened in hanging victim, it will have stocks and gloves appearance?

False

C) This postmortem change is not affected by decomposition?

False

D) It was caused by coagulation of muscles?

False

E) This postmortem change helps to determine the position and time of death?

True

9) Case of hypostasis in the face and chest? (MINI OSCE 017)

A) What is the postmortem change present in this picture?

Hypostasis

B) ATP level play a role in this post mortem change?

False

C) This photo may hint a toxin expected to be found in blood?

True (Because this type of hypostasis occur in patients intoxicated with drug or alcohol and they die falling on their faces)

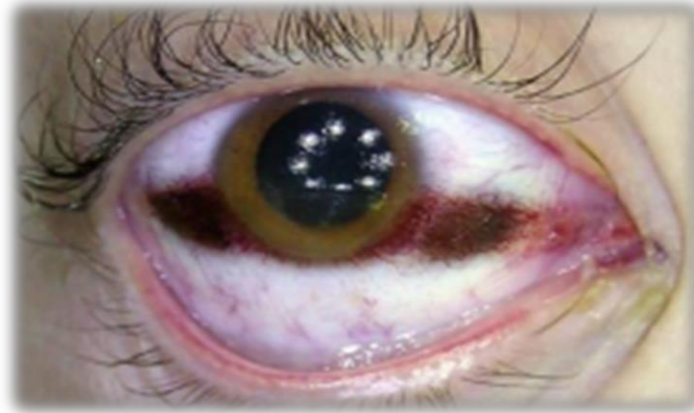
D) You can assume the person preserved position after death from this photo?

True

E) The area of whitish discoloration is called?

Contact pallor.

10) Look at this picture carefully then, answer the following questions? (MINI OSCE 019)



A) What is this sign called?

Tache Noir

B) This sign is pathognomonic for asphyxia?

False

11) Look at this picture carefully then, answer the following questions? (MINI OSCE 019)



A) This postmortem change happens due to the difference between the body temperature and the environment temperature?

False

B) If an incision was made below the arrow, the blood will come out clotted?

False

C) The cause of the pale, white areas is _____?

Pressure

D) Livor mortis will look pale and flame hemorrhages will be found upon heart autopsy, in case of severe bleeding?

True

E) If the body was cold and the muscles are stiff then the time of death is less than 8 hours?

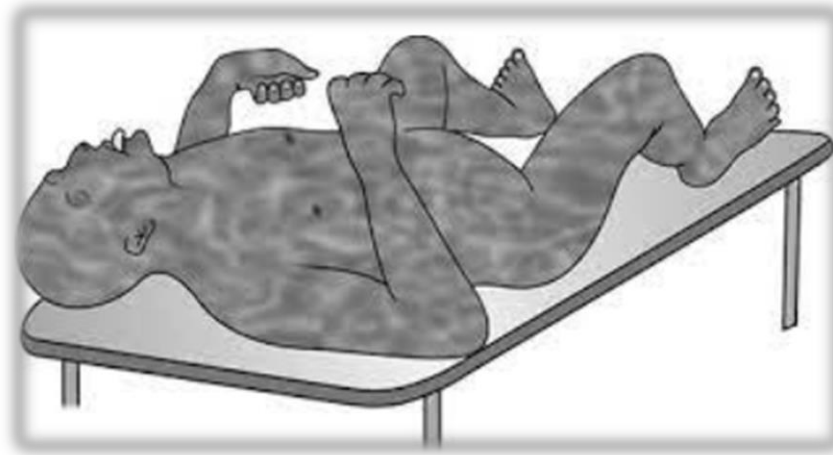
False

Cold and stiff 12-24 hours

flame hemorrhage is a dark red discoloration seen in the inner wall of LV
it happens due to severe blood loss
the heart pumps empty so superficial ischemia happens

BURNS

1) A victim with CO 12% is found in a closed factory with negative autopsy except this lesion: (MINI OSCE 017+018+019)



A) True or false: cause of death is CO poisoning

False

B) What's the name of this position?

Pugilistic attitude

C) What is the cause of this position?

It's due to muscle dehydration and coagulation of proteins in the muscle due to high heat exposure

D) How to differentiate between heat hematoma and traumatic epidural hematoma?

Carboxyhemoglobin level (high in heat hematoma)

E) True or false: this sign is definitely antemortem

False

F) What is the cause of death?

best way to differentiate is carboxyhemoglobin level
there is other differences (know at least 3)

Neurogenic shock

G) What is the manner of death?

Accidental

H) Is this lesion fatal?

No

I) Mention 2 sure antemortem signs?

Presence of vital reaction and soot in the lower respiratory tract

J) Name 2 differences between postmortem and antemortem:

Differentiation 14.4: Antemortem and postmortem burns

S.No.	Feature	Antemortem burns	Postmortem burns
1.	Line of redness	Present	Absent
2.	Vesicles	Contain serous fluid, rich in albumin, chloride and some polymorphs	Contain air; if fluid is present, it contain little albumin and no chloride
3.	Base of vesicles	Red and inflamed	Dull, dry, hard and yellow
4.	Soot in upper respiratory tract	May be present	Absent
5.	Inflammation and repair	Present along with pus and slough	Absent
6.	Healing	Granulation tissue seen in old cases	Absent
7.	Carboxyhemoglobin	Present	Absent
8.	Enzyme reaction	Increase in enzymes in the periphery of burns	No such increase

soot in the
LOWER
airway

K) Carboxyhemoglobin is always elevated in these cases (t/f):

False

2) Look at this picture carefully then, answer the following questions? (MINI OSCE 017+018+019)



A) What is the type of this wound?

Joule burns

B) What is the most common cause of death in this case?

Cardiac dysrhythmia (V fib) / paralysis of respiratory muscles

C) What would you find in the autopsy?

Negative autopsy, not specific findings (Zenker's degeneration, petechial hemorrhage, focal necrosis with hemorrhage in the heart, congested lungs, Brain edema)

D) in these cases, hypostasis color will be different?

No

E) in these cases rigor mortis will be faster?

Yes

F) Give two artificial findings seen in burning victims:

Heat split, pugilistic, heat hematoma.

E) What is the mode of death?

Syncope

3) Look at this picture carefully then, answer the following questions? (MINI OSCE 017+018)



A) What is the name of the sign in the left picture? And it's due to death by what?

Pugilistic... Dry flame burns

B) True or false: this sign in the left picture is a definite antemortem sign?

False

C) How to differentiate the cause of hematoma is is heat or trauma?

Carboxyhemoglobin level

D) What are the wounds on the arms? Do they indicate a struggle?

Heat splits... No

4) Look at this picture carefully then, answer the following questions? (MINI OSCE 019)



name not type

A) What is the type of wound?

Joule burns

B) What you will see in autopsy?

Oval, chalky white, shallow, centrally collapsed blister

الجواب ب السؤال اللي قبل صح

C) What is the mode of death?

Syncope

D) What is the manner of death?

Accidental

E) True or false: Petechial hemorrhage is path gnomonic for this condition?

False

5) Look at this picture carefully then, answer the following questions? (MINI OSCE 019)



A) What is your diagnosis?

Scald burns

B) What is the deactivation period?

If it first degree, up to week

C) True or false:

1. This condition is common in homicide?

False

2. This condition is common in accidents?

True

6) Look at this picture carefully then, answer the following questions? (MINI OSCE 019)



- A) Manner: accidental
- B) Mode: syncope
- C) Lesion: joule burn
- D) Rigor will be: faster

7) Look at this picture carefully then, answer the following questions? (MINI OSCE 017+018)



A) What do you see?

Fasciectomy

heat split

B) Patient stayed at hospital then died, what is the cause?

Sepsis

Asphyxia

1) A 42-year-old male, Mr. John Doe, was found deceased in his apartment. He was last seen alive two days before his body was discovered by his landlord, who became concerned after noticing a foul odor emanating from the apartment. The apartment door was locked from the inside, and no signs of forced entry were observed.:

(MINI OSCE 017+018)

this is a
case of
hanging?
or
garotting
??



A) True or false: there would be nail abrasions and contusions?

False

B) True or false: hyoid bone is commonly fractured?

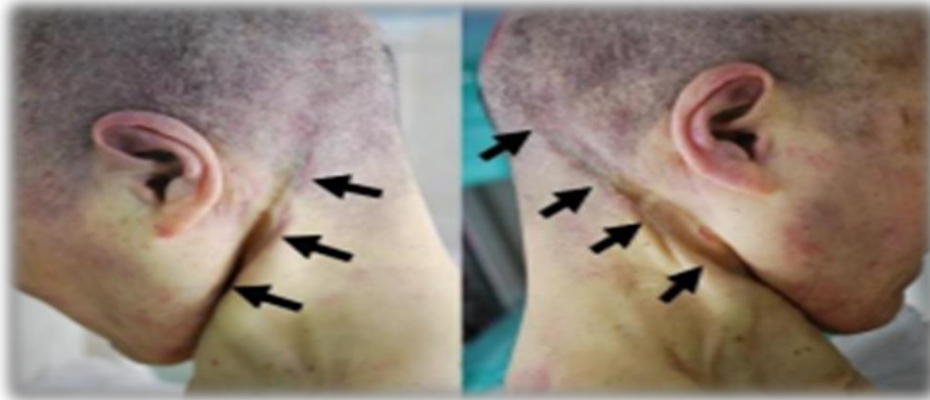
~~False~~

outward fracture of hyoid is common in hanging

C) True or false: petechial hemorrhage is rare in this case?

False

2) The body of a middle-aged male was discovered in his apartment, lying face-up on the floor. Upon examination, there were noticeable oblique imprints around his neck, located just above the thyroid gland: (MINI OSCE 018)



A) This is a case of strangulation:

False

B) There is not damage to the arteries:

False

C) What are the wounds called?

Imprint abrasions

or pressure abrasion

D) Mode of death:

both is correct

Asphyxia

imprint is a subtype of pressure

E) There is anterior displacement of hyoid:

False

posterior

3) Look at this picture carefully then, answer the following questions? (MINI OSCE 016+017)



A) What is the type of wound?

Pressure abrasion

B) What is the manner of death?

Suicidal

C) What is the hypostasis name?

Gloves and stocking

D) True or false: Hyoid bone fracture associated with this injury?

True

E) What is the type of anoxia that will happened with this condition?

Stagnant anoxia

anoxic anoxia

in All types of mechanical asphyxia it's anoxic. anoxia

4) Look at this picture carefully then, answer the following questions? (MINI OSCE 019)



you can't tell
unless you can see the feet
if they are touching the ground partial
if not then complete

A) Type:

Partial hanging

B) most common mode of death

Asphyxia

C) hypostasis:

Gloves and Stocks

D) name of underlying wound

Imprint Abrasion

5) A case of hanging with victim's knees flexed touching the floor?

(MINI OSCE 017+018)



A) Weight used in killing the victim:

Head weight (almost 5 kg?)

B) Type of Anoxia (Stagnant/ Anoxic):

Anoxic

C) The surest sign that the hanging is antemortem:

Drooling of saliva

D) Cricoid fracture is common:

False

E) This hypostasis is right for hanging victim: ↗

True

gloves and stocking?

6) Look at this picture carefully then, answer the following questions? (MINI OSCE 017)



A) In this case of death, livor mortis will develop faster?

False

B) This is a case of complete hanging?

False

C) What is the name of the lesion that will develop on the neck, underneath the rope?

Imprint abrasion

D) What is the mode of death?

Asphyxia

E) If there were signs of struggle around the deceased, what would be the manner of death?

Homicide

7) Look at this picture carefully then, answer the following questions? (MINI OSCE 019)



A) The lesion? **six penny sign**
Contusion

B) Fracture of (cricoid) is suspected:

False

cricoid fracture is pathognomonic for throttling

C) Manner:

Homicide

wounds

1) Look at this picture carefully then, answer the following questions? (MINI OSCE 018)



A) What is the type of object that used?

Sharp object

B) If depth was more than width: ~~length~~

A stab wound

C) What's the duration of incapacity and what's the prognosis?

7-10 days, good prognosis

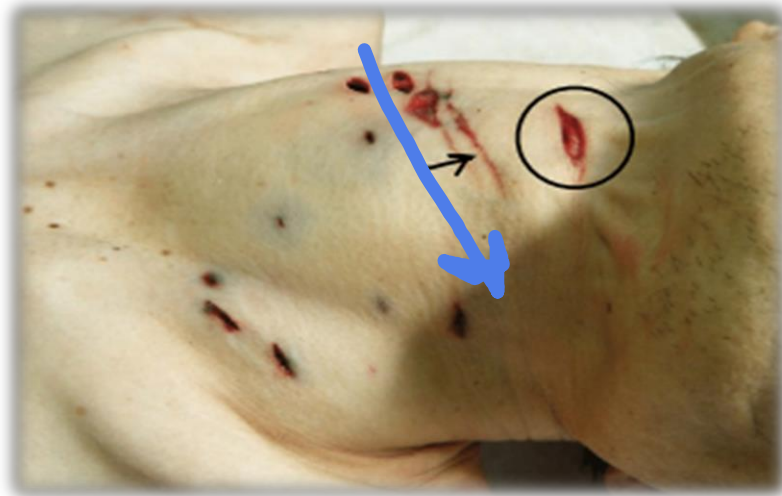
D) True or false: would be worse if penetrating

True

E) what is the direction of the wound?

Right to left (tailing is on the left)

2) Look at this picture carefully then, answer the following questions? (MINI OSCE 017+018)



A) What is the type of the wound in the circle?

Stab wound

B) What's the direction of the wound the arrow points to?

From the right side to the left side of the dead body

From up to down the picture

C) What do you think the manner of death in this case?

Homicidal

3) Look at this picture carefully then, answer the following questions? (MINI OSCE 016)



A) What is the type of this wound?

Patterned abrasion

B) What is the type of anoxia (toxic, stagnant, anoxic)?

Anoxic anoxia

C) True or false: the shown hypostasis is typical for this case?

True

D) True or false: the postmortem interval is less than 24 hours?

True

E) True or false: this is a common homicidal case?

False

4) Look at this picture carefully then, answer the following questions?

(MINI OSCE 018)



A) What is the type of this wound?

Contusion

B) What is the mechanism of injury?

Extravasation of blood due to ruptured blood vessels

up to a week C) كم مدة التعطيل؟ **1-2 يوم**

D) ما تقييمك لحالة المريض؟ **حسنة**

5) Patient present to ER, vitals stable, he only has this wound on forehead: (MINI OSCE 017+018+019)



A) What's his general status?

حسنة

incised wound الصورة

B) Accurate sign of the wound?

Bridging of tissues

الاجوبة laceration

C) Caused by?

Blunt injury

D) Incapacity period?

Up to 1 week

E) What's the report given to him in the ER?

تقرير طبي أولى

F) What is the most important characteristic of this type of wound?

Bridging of nerves and vein at the base

6) A patient came to the ER after RTA, after examination, his GSC was 15/15, his vitals were stable, there is linear skull fracture over the temporal area, and after MRI was done for him, it shows hematoma. Also, there were multiple bruises and an abrasion on the back... (MINI OSCE 019)

A) How would you classify this patient STATUS?

Intermediate

general condition

B) What is the deactivation period?

2-4 weeks

incapacity period

C) Do you expect the patient will have disability in the future?

Yes

not necessarily

D) What are the specific characteristics of laceration?

Blood vessels, nerves, and delicate tissue maybe observed at the depth of the wound

bridging of tissues

E) What is the type of abrasion?

Brush(graze) abrasion

7) Look at this picture carefully then, answer the following questions? (MINI OSCE 017+019)



A) What is the type of the wound?

Incised wound

B) The object that caused the wound?

Sharp object

C) Give 2 characteristics for this type of wounds

Clean cut border, no bruises at the margin, nerve and vessels are clearly cut

D) What is the deactivation period?

Up to week

E) True or false: the direction is from downward to upward

Depending on the tail

8) Look at this picture carefully then, answer the following questions? (MINI OSCE 017)



A) What is the type of wound?

Imprint abrasion

B) Where is the site of hypostasis?

Gloves and stocking

D) What is type of anoxia that happened with this condition?

Anoxic anoxia

E) True or False:

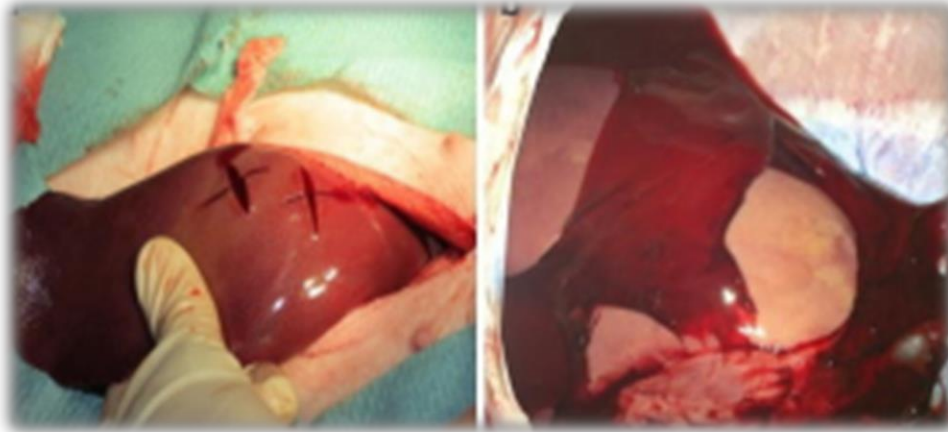
1. Petechial hemorrhage is Patho gnomic?

False

2. Both homicide and suicide need investigation?

True

9) Look at this picture carefully then, answer the following questions? (MINI OSCE 018)



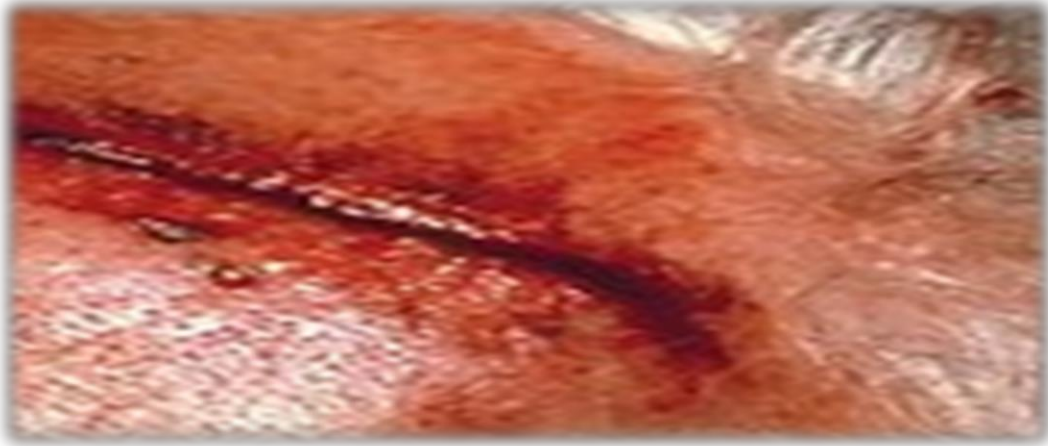
A) What is the mode of death?

Syncope

B) You should send a toxicological screening because this finding is not enough to determine the cause of death?

False

10) Look at this picture carefully then, answer the following questions? (MINI OSCE 019)



A) This type of wound is?

Laceration

B) This type of wound result from sharp obj?

False.

C) This wound will heal without leaving a scar?

False

D) This type of wound is mostly seen in RTA cases?

TRUE

E) If the lacerated wound is the only injury found in this case what is the incapacity period?

1-2 weeks.

11) Look at this picture carefully then, answer the following questions? (MINI OSCE 019)



A) What is this?

Abrasion

B) Incapacity period:

3-4 days

C) What is the force?

Friction/ Shearing (some say its blunt so make sure)

all are correct

D) Give one type of this lesion?

Linear/Graze/Patterned

E) One medico-legal importance?

knowing the causing force

12) Look at these pictures carefully then, answer the following questions? (MINI OSCE 017+018)



A) Wound A is caused by _____ force?

Blunt

B) Wound A happened postmortem?

False

C) Wound B is the only case where you can see bridging?

True

D) Both wounds will heal at the same time?

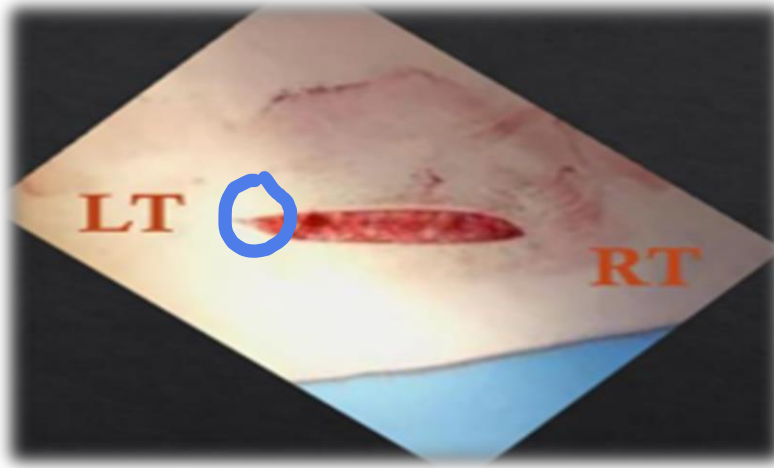
False

E) What is the incapacity period for both types of wounds?

2 -5 days

up to a week

13) Look at this picture carefully then, answer the following questions? (MINI OSCE 017)



A) What type of wound is this?

Incised wound

B) This type of wound is caused by _____ object?

Sharp

C) The direction of the injury is from right to left?

True ; tailing was on the left

D) This type of wounds heal without leaving a scar?

False

E) If the patient was hemodynamically stable, and he had no other injuries, the state of the patient is?

حسنة

Forearms injuries

1) Look at this picture carefully then, answer the following questions? (MINI OSCE 017)



A) What is the direction of beveling?

Inward (internal beveling)

B) What is the sign seen in the picture?

Muzzle imprint

C) what is the distance?

Contact

D) True or false: there is multiple entry points?

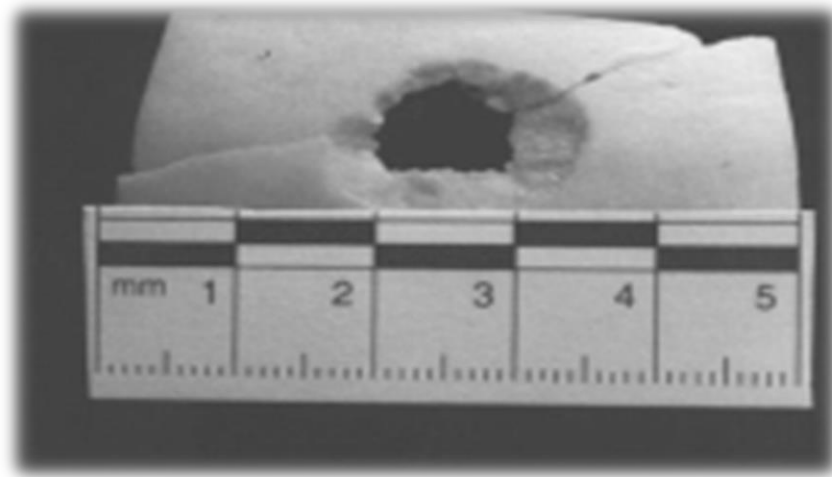
False

E) True or false: there is no skull fracture?

False

2) Picture of skull with hole inside: gunshot....

(MINI OSCE 018)



A) what can you see?

External beveling

B) what signs on skin can we see?

Nothing! Picture showed only skull - cannot judge

it is an exit wound

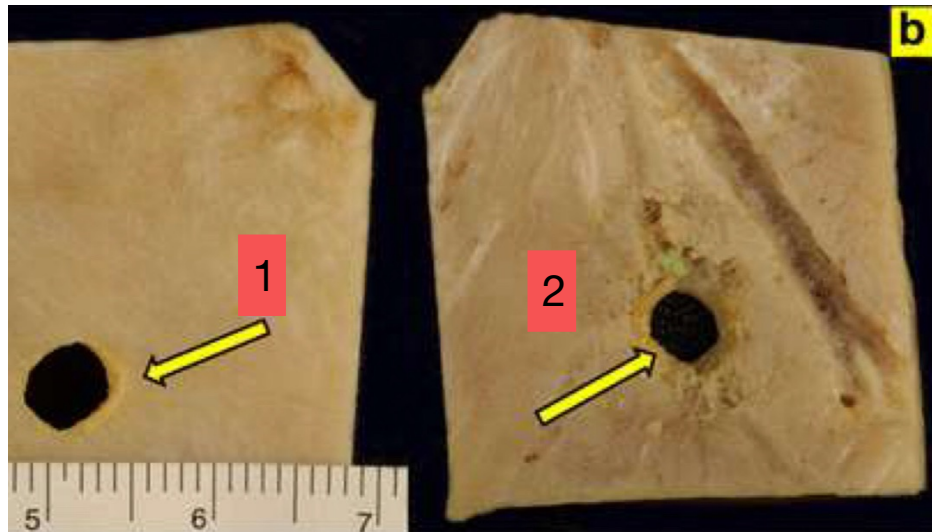
C) what is the mode of case?

Coma > Brain injury

D) hypostasis in this case will be faint?

No

3) Look at these pictures carefully then, answer the following questions? (MINI OSCE 018)



A) The surroundings in picture 1 is non washable (t\f)?

True

B) death is caused in picture 2 by hemorrhage (t\f)?

False

C) The beveling in picture 2 is internal (t\f)?

False

D) The distance in picture 2 is:

Undetermined because it's an exit wound

E) If the gun wasn't found then the manner of death is:

Homicide

4) Look at this picture carefully then, answer the following questions? (MINI OSCE 018)



A) What is the type of wound?

Gunshot wound – lacerated wound

B) What is the mechanism of death?

Bleeding due to gunshot

C) What is the mode of death?

Coma

D) What is the manner of death?

Homicidal, suicidal

E) What is the distance between the tool that was used and the victim?

Contact

location on the body?

5) Look at this picture carefully then, answer the following questions? (MINI OSCE 019)



A) The cause of death is..... due to gunshot wound, and the distance is

Bleeding, near

B) What is the manner of death?

Homicidal, Suicidal

C) True or false: The colored pattern on the skin is washable?

False

6) Look at this picture carefully then, answer the following questions? (MINI OSCE 017)



A) What is the mode of death?

Coma

B) What is the cause of death?

Bleeding due to gunshot

brain laceration

C) What is the type of beveling below in the wound?

Internal beveling

D) True or false:

1. These marks around the wound are washable?

False

2. The distance of the body from the gun cannot be determined?

False

7) Look at this picture carefully then, answer the following questions? (MINI OSCE 019)



A) What is the type of wound?

Muzzle Imprint

B) Distance:

Firm contact

C) The mechanism of death is bleeding:

False

D) Manner of death is most likely (give 2):

homicide / Suicide

E) The beavering of this wound is external:

False

8) Look at this picture carefully then, answer the following questions? **(MINI OSCE 019)**



- A) The beveling is: (external)
- B) The distance is: (undetermined)
- C) The fire marks at the skin at this site is :(nothing)
- D) The type of wound at the skin: (laceration)
- E) Penetrating or perforating: perforating

9) Gunshot to abdomen:

(MINI OSCE 019)

- A) Asked about beveling: No beveling as there is no flat bone
- B) Distance: ~~Distinct~~ undetermined
- C) Direction of gunshot can be right left up down back front (true or false):
undetermined
- D) Mode of death: Syncope



التقارير الطبية

تقرير اولي مذكور فيه وجود سحجات وجرح بطول 5 سم بالرأس من غير كسور:

(A) ما نوع التقرير؟ اولي

(B) ما نوع الجرح المذكور وكم مدة التعطيل؟ جرح رضى ومدة التعطيل اسبوع

(C) ما نوع التقرير الذي يذكر فيه ان المريض يعاني من عاهة دائمة؟ التقرير النهائي

2) Some question about medical reports, I think it was a guy who was in an accident, had a skull fracture and a hematoma, had a metal plate replacement of a bone, GCS 8/15, unstable signs:

(MINI OSCE 018)

A) General condition of the patient:

سيئة

B) Incapacity period:

if the picture was a linear fracture: 2-4 weeks

if the picture was a displaced fracture: 2-3 months

C) Does he have a permanent disability: yes

D) The first report written is called..... And is written by.....

الطبيب المعاین/التقرير الأولي

E) If he heals and recovers, he will get a report called.....

التقرير القطعي

even if he heals completely in 2 months he needs

تقرير لاحق

عشان احتمالية يصير عنده مضاعفات

على الاقل 6 اشهر لازم يمر

3) Someone was in a fight. He came to ER with multiple fractures in his nose, and hematoma. he was vitally stable ...

(MINI OSCE 019)

A) How would you classify this patient STATUS?

Intermediate

B) What is the deactivation period?

2-4 weeks

C) Do you expect the patient will have disability in the future?

No

كل المشاجرات تعتبر حالات قضائية True or false

True

ما هو نوع التقرير و من يكتبه؟

أولى/ من أول طبيب معه مزاولة مهنة دائمة قام بتقييم المريض في الطوارئ

4) RTA stable vitals with leg fracture... **(MINI OSCE 019)**

A) Describe state of patient:

متوسطة

B) What is the deactivation period?

12-16 weeks

C) Does he need?

تقرير قطعي بس يخلص

D) All RTA are considered medicolegal (t\f)

True

Toxicology

Principles of Management of Acute Poisoning

1) Patient was found Drank Potassium hydroxide, True or false:

(MINI OSCE 017)

A) induction of emesis is beneficial

False

B) Administration of active charcoal is ineffective

True

C) Dilution with suitable quantity of ascorbic acid is usually done

False

D) Administration of suitable amount of Milk As demulcent

True

E) Immediate conduct gastric lavage is necessary

False

2) A 68-year-old man, a retired farmer living in Amman, was found unconscious in his small, dimly lit kitchen. Patient had accidentally ingested a small amount of kerosene, mistaking it for a medicinal tonic that he often kept on the same shelf.... (MINI OSCE 017+018+019)

a. What is the complication?

Chemical Pneumonitis

b. Active Charcoal can be beneficial?

False

c. Gastric lavage with unprotected airways will lead to?.

Aspiration leading to chemical pneumonia

d. True or false: Milk is effective?

False

e. Milk ingestion will result in?

Increased absorption

f. True or False: Castor oil increase its excretion?

False

3) A 4-year-old child is brought to the emergency department after accidentally ingesting sulfuric acid, a highly corrosive substance commonly found in household cleaning products. The ingestion results in immediate and severe burns to the mouth, throat, and esophagus. The child is in visible distress, crying inconsolably, and drooling excessively due to the intense pain and inability to swallow...

(MINI OSCE 018)

A) What you will give as a demulcent?

Egg/ Milk

B) True or False: Gastric Lavage is not indicated?

True

4) A child takes a high dose of HCL.... (MINI OSCE 017)

a. Active charcoal is?

Ineffective

b. Induce emesis is?

Contraindicated

c. Gastric lavage is?

Contraindicated

d. True or false: Diuresis with sodium bicarbonate is usually done?

False

e. What you will use as an emulsant?

Milk

5) A 4-year-old boy was brought to the emergency department after his parents discovered him playing in the garage, where he ingested a small amount of car battery acid. The child was immediately rushed to the hospital after he began crying in pain, drooling excessively, and refusing to swallow. On examination, the child appeared distressed, with signs of oral burns, including redness and blistering on his lips and tongue.... (MINI OSCE 017+018)

A) Induction of emesis is:

Contraindicated, may result in expulsion

B) Activated charcoal is:

Ineffective and may impede wound healing

C) we should do gastric lavage (t/f):

False, risk of perforation

D) we should give sodium bicarbonate to neutralize the acid:

False

E) give as a demulcent:

Milk

6) A 45-year-old male presents to the emergency department after accidentally ingesting a significant amount of sodium hydroxide (NaOH) while attempting to clean a clogged drain. The patient reports immediate onset of severe burning pain in his mouth, throat, and chest, followed by difficulty swallowing and excessive drooling. On examination, there are signs of oral and esophageal burns, including erythema, ulcerations, and tissue necrosis. The patient is in severe distress, with stridor and hoarseness, indicating possible airway involvement.... (MINI OSCE 019)

A) True or false: give an acid to neutralize?

False

B) True or false: it is effective if we give charcoal?

False

C) It is contraindicated to induce emesis because of risk of?

Aspiration pneumonia

D) We give a large amount of as a demulcent?

Milk

ALCOHOL poisoning

1) A 55-year-old male is brought to the emergency department by his wife after she found him confused and disoriented at home. She reports that he had been drinking heavily the previous evening, and she later discovered an empty bottle of automotive antifreeze in the garage. On examination, the patient is lethargic, with slurred speech and ataxia. His breath has a faint odor of alcohol, and he is complaining of severe abdominal pain. Laboratory results reveal a high anion gap metabolic acidosis, elevated serum osmolality, and the presence of oxalate crystals in the urine.... **(MINI OSCE 017)**

A) What is the cause?

Ethylene glycol

B) What is the antidote?

Fomepizole or ethanol

C) True or false: We should correct the hypercalcemia?

False

D) True or false: In this case we can induce emesis with salt and water?

False

2) A 42-year-old man is brought to the emergency department by his wife after she found him unresponsive in the garage next to an open container of antifreeze. Earlier that day, he had complained of nausea, abdominal pain, and dizziness. Upon arrival, he is semi-conscious, with slurred speech and difficulty focusing. His breath has a faintly sweet odor, reminiscent of antifreeze. Initial lab tests reveal a high anion gap metabolic acidosis and elevated serum osmolality. As the medical team investigates further, they suspect ethylene glycol poisoning, a common component of antifreeze:

(MINI OSCE 016+017+018+019)

A) True or false: Give the patient charcoal?

False

B) Do blood for convulsions?

Ca++ level

C) Do urine test?

Analysis (ca++ oxalate maybe??)

D) Mention 2 antidotes?

Ethanol & fomepizole

E) What would happen if we give the patient disulfiram?

It leads to accumulation of formaldehyde & glycolaldehyde (toxicity symptoms)

3) A 56-year-old male presents to the emergency department with symptoms of confusion, slurred speech, and an unsteady gait. He was found by a friend at home, where he had been drinking heavily throughout the day. The friend reports that the patient consumed a large amount of alcohol over the past several hours. On examination, the patient has a strong odor of alcohol on his breath, flushed skin, and is visibly agitated... (MINI OSCE 017+018)

A) True or False: give CNS stimulant?

False

B) Give to improve unconsciousness?

Thiamine

C) Give To maintain consciousness?

Glucose

D) Give an example of an Antabuse?

Metronidazole or Sulfonamide

E) What is the name of reaction between alcohol and Antabuse?

Disulfiram reaction

4) Baby founded that he drank antifreeze.... (MINI OSCE 017+019)

A) What should you give?

Fomepizole or ethanol

B) What will we find in urine?

Calcium oxalate

C) What we give for convulsions?

Benzos then Calcium

D) What is the toxic agent?

Ethylene glycol >converted to glycolaldehyde (toxic metabolite)

5) Anti-freeze ingestion case : (MINI OSCE 017+018)

A) Why we should do urine analysis ?

To Check if there is Calcium oxalate

B) What is the Antidote?

Ethanol or fomepizole

C) Why heart monitoring is done ?

Check if there are any kind of Arrhythmia

D) What is the result of Disulfiram administration?

Increase toxicity through increase glycolaldehyde

E) Can we give Calcium gluconate for convulsion Controlling ?

No, it's given to treat arrhythmia

6) A 60-year-old male was brought to the emergency department by his family after being found unresponsive at home. The family reported that he had been drinking heavily throughout the day, consuming approximately two bottles of vodka. His blood glucose level was 50 mg/dL, and his blood ethanol concentration was markedly elevated at 400 mg/dL.... True or False?

(MINI OSCE 019)

a. Induce emesis with hypertonic saline:

False

b. A trial of buprenorphine should be given:

False

c. High dose of caffeine should be given to increase consciousness?

False

7) 21 years old male, presented with coma, depressed respiration, constricted pupils, I.V marks... (MINI OSCE 017+018+019)

A) What is your diagnosis ?

Heroin intoxication

B) What is the antidote ?

Naloxone

C) You should be aware while you take the blood sample , why?

Due to risk of HIV , and hepatitis infection as he has I.V marks

D) Does caffeine reverse his condition ?

NO

E) Do you give a cocaine as a reversal of suppressant

No

F) What are the drug that used in withdrawal treatment ?

Methadone , buprenorphine

pesticide poisoning

1) A 45-year-old male farmer presents to the emergency department with symptoms of acute poisoning after a recent exposure to organophosphate pesticides. He reports sudden onset of severe headache, dizziness, excessive salivation, and difficulty breathing. On examination, he is found to be tachycardic, diaphoretic, and has pinpoint pupils. Neurologically, he exhibits muscle twitching and generalized weakness. His vital signs show elevated blood pressure and a rapid heart rate. The patient's history reveals he was spraying pesticides on his crops without appropriate protective gear.... (MINI OSCE 017+018)

A) What is the cause?

Organophosphate

B) True or false: Give atropine immediately?

False

C) If atropine is given immediately what will happen?

It might induce ventricular dysrhythmia in hypoxia patients (give O2 first)

D) Mention other antidote?

Pralidoxime

E) True or false: Measure the blood level of cholinesterase?

True

F) What will happen if we give physostigmine?

It will potentiate anticholinesterase activity which will increase organophosphate toxicity

G) This poisoning is due to accumulation of what substance?

Acetylcholine

E) Why we give pralidoxime in this case?

To reverse the phosphorylation of cholinesterase to ameliorate muscle weakness, fasciculations and alteration of consciousness

2) A Farmer present to the ER with increase lacrimation, salivation, tremor, pallor, hypertension (signs of toxicity)

(MINI OSCE 017+019)

A) What is the cause of his symptoms?

Pesticides poisoning

B) What should you give to the patient after the supportive therapy?

Atropine

C) What is the Medication that used to reverse the toxin?

Pralidoxime

3) Case of pesticide poisoning....(MINI OSCE 019)

A) The poisoning can be due to or

carbamate or organophosphate

B) True or false :The symptoms is due to organochlorine poisoning

false

C) What is the first thing to do ?

ABC , intubation , give O2 then decontamination of clothes and wash the body with soap and water

D) What are the antidotes ?

For organophosphate :atropine , and pralidoxime

for carbamate : atropine only

E) The symptoms that happens to the patient are due to accumulation of

Ach

F) What will happen if you start the management with atropine before giving O2?

Ventricular arrhythmia in hypoxic patient

G) Why we don't give physostigmine ?

increase anticholinesterase activity >increase Ach and increase the toxicity

H) is the investigation that we should sent ?

RBC cholinesterase activity

Doping in sports

1) In giving an advise for sport doping, answer the following with true or false: (MINI OSCE 016+017+018+019)

A) Taking beta blockers for stress relief?

False

B) Blood transfusion is allowed for sport players without real indication?

False

C) It is allowed to do an acidification of urine in extreme **amphetamines** intake?

False

D) It is allowed to take diuretics to lower the weight?

False

E) It is allowed to take morphine for pain after exercise?

False

2) An athlete asked you for advice:

(MINI OSCE 016+017+018+019)

A) Take beta blocker:

False

B) Take bicarbonate to eliminate amphetamines:

False

C) Chronic use of diuresis leads to:

Dehydration \ decreased circulation in of blood volume \ renal disorders ... etc.

D) Use of erythropoietin leads to:

Induced infection \ stroke \ HTN \ increase blood viscosity

CNS Stimulants

1) A case of a child poisoned with ADHD drug (15 pills of amphetamine) answer the following with true or false:

(MINI OSCE 018+019)

A) Measure the blood pressure?

True

B) Monitor for arrhythmia?

True

C) Naloxone is an antidote?

False

D) Alkalization of urine to induce elimination?

False

E) Use antipyretic to treat hyperthermia?

True

CNS Depressants

1) A young man was rushed to the ER with signs of CNS depression, respiratory depression, and pinpoint constricted pupils. He had injection marks on his arms... **(MINI OSCE 017+018+019)**

A) What is he intoxicated with?

Heroin

B) What to look for using toxicology to confirm your diagnosis?

6-MAM (6-monoacetylmorphine)

C) What's the antidote?

Naloxone

D) What to use for withdrawal symptoms?

Methadone or Buprenorphine

CO POISONING

1) A 38-year-old male farmer was brought to the emergency department after being exposed to diesel fuel while operating a diesel water pump. He had been using the pump for irrigation purposes and accidentally inhaled diesel fumes when the pump malfunctioned, causing a significant leak. Upon arrival, the patient exhibited symptoms including severe dyspnea, chest pain, and a persistent cough... (MINI OSCE 017+019)

A) What is the antidote?

O₂

B) True or false: There will be an alkalization of the patient blood

False

C) True or false: Remove the patient from the place

True

D) If the patient found dead then what is the cause of death?

Hypoxia

2) A 34-year-old woman is found unconscious in her bathroom by a concerned friend who noticed she hadn't responded to phone calls. The friend breaks down the door and discovers the woman lying on the floor, surrounded by a faint smell of gas. Emergency responders arrive and suspect carbon monoxide (CO) poisoning due to a malfunctioning gas heater in the bathroom. The patient is quickly moved to fresh air and given supplemental oxygen. At the hospital, her carboxyhemoglobin levels are tested and found to be significantly elevated... (MINI OSCE 017)

A) What is the antidote?

100% O2, with hyperbaric O2

B) Do you start treatment at bathroom?

No, the patient should be removed to area with fresh air

C) Do we give CO2 to stimulate breathing?

No, we don't

3) A 44-year-old woman was found lying dead in a closed bathroom, with a hot gas geyser inside, and no ventilation.

(MINI OSCE 018)

A) What's the first thing to do?

Take her out of the bathroom

B) What's the cause of death?

CO poisoning

C) What's the antidote?

O2

D) pH of the blood will become:

Low (acidosis)

4) A woman was found in bathroom with iso-propane water geyser,
True or false: **(MINI OSCE 017+018)**

A) Remove the patient from the area and initiate supportive management

True

B) This is a case of CO₂ poisoning

False – CO poisoning

C) Avoid 100% O₂

False – this is the treatment

D) Alkalization of plasma is beneficial

False

E) Advise the patient to do hard exercise

False – advice to rest

F) The PH of blood expected to be acidotic:

True

G) What is the cause of the symptoms ?

left shift of O₂ – Hg curve > leads to increase affinity of hg to O₂

5) A 34-year-old man was found unconscious in his garage, which was filled with thick smoke and the acrid odor of burning material. The garage was cluttered with a mix of old furniture and cardboard boxes, some of which were smoldering from a recent fire. Emergency responders quickly determined that the source of the smoke was a malfunctioning gas heater that had been operating for hours. The patient, who had been using the heater to warm the space on a particularly cold night, was lying on the floor near the heater. The patient was confused, had a headache, and a faint cherry-red hue to his skin. Upon arrival at the hospital, a blood test confirmed elevated levels of carboxyhemoglobin, indicating CO exposure...

(MINI OSCE 019)

A) Treat patient at the scene?

False

B) Give (thiamine) in case he is deficient?

False

C) Give (glucose) to restore consciousness?

False

D) Give amphetamine to stimulate CNS?

False

E) Tx:

100% hyperbaric O2

F) Give bicarbonate to treat acidosis: T/F

False

Hallucination

1) A young male took a white powder which resulted in hyperthermia and convulsions: (MINI OSCE 018)

A) What is the substance?

Cocaine

B) What is the antidote?

No definite role

C) What we could give the patient to control convulsions?

Benzodiazepine

D) This poisoning case is due to accumulation of what substance?

Dopamine

E) What substance we could measure to confirm the diagnosis?

Benzoyllecgonine in urine