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Internal Bleeding

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Learning Goals

- Student will learn situations when to expect internal bleeding.
- Student will learn first aid for bleeding from body orifices.

Types of Bleeding

According to the vessel

- Arterial:
BRIGHT RED PULSING blood
- Venous:
DARK RED blood
flows slowly but continuously
- Capillary:
blood slowly seeps from the
wound

manifestation

- Internal
- External
- Traumatic
- Non-traumatic

Internal Bleeding

- Body cavities:
 - chest
 - abdomen
 - pelvis
 - joints
- Areas bounded by muscle fascia

- Very serious, often life threatening
- It is not visible
- Outside the hospital, difficult to diagnose!

Internal Bleeding

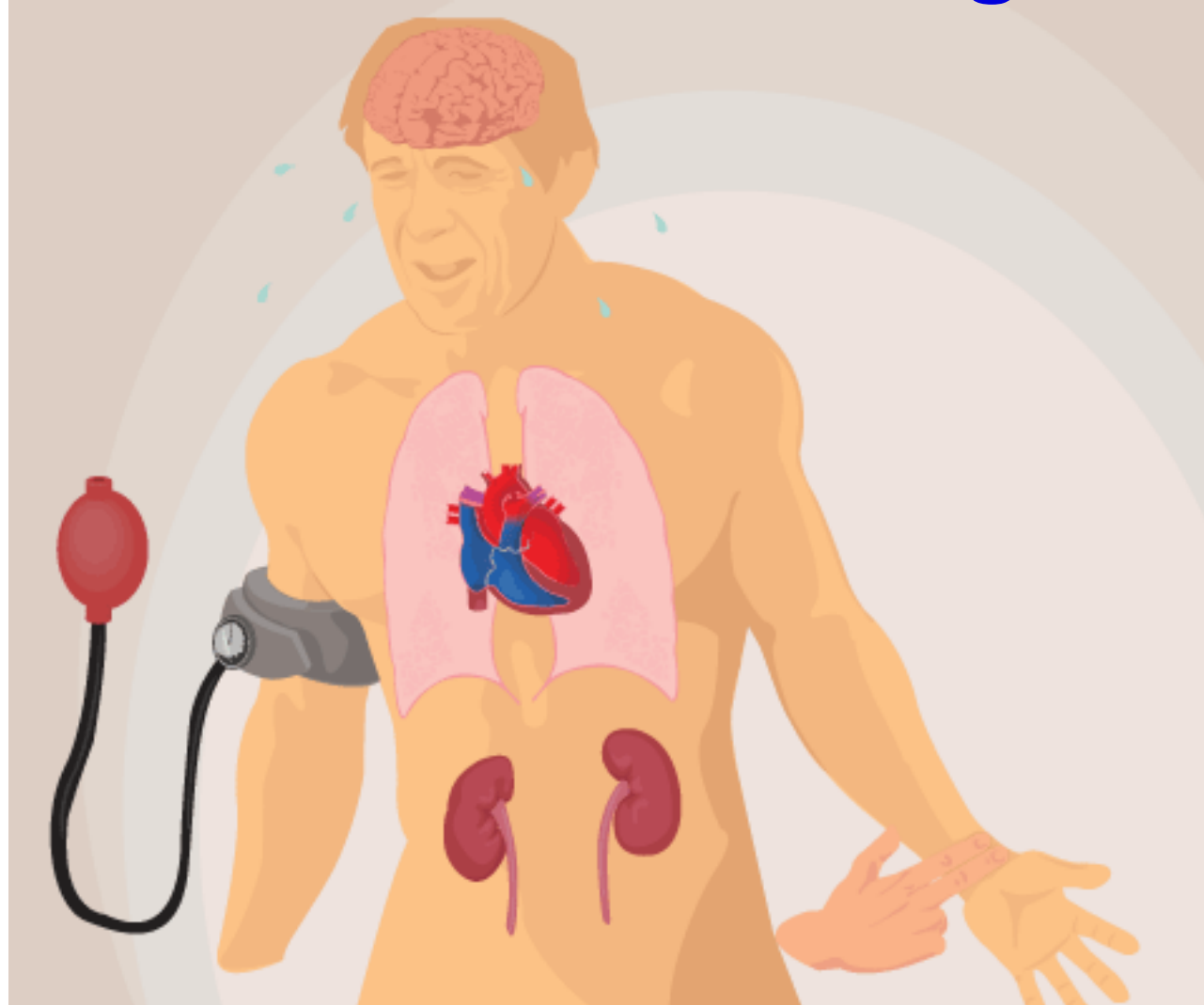
Traumatic

- (Intracranial injury)
- Chest / abdomen / pelvis injuries (large vessels, liver, spleen, kidney)
- Fractures of long bones

Non-Traumatic

- Bleeding from esophageal varices
- Bleeding from stomach ulcers
- Ectopic pregnancy
- Rupture of AAA

Symptoms of internal bleeding



Symptoms of internal bleeding

- Shock
- Lost of consciousness

- Abdominal pain, tense abdominal muscles, relief position

- Extensive bruises
- Deformities of the limbs

- Bleeding from the oral cavity, rectum or vagina; blood in the urine, blood from the ears
- Vomiting or coughing up blood
- Black, tarry, smelly stool

First Aid

- SSSABC
- It is necessary to think about internal bleeding especially in injuries, car accidents, pregnant women
- Always call EMS!

Conscious:

- Calm the patient, provide him with a relief position
 - in case of an abdominal injury, place the patient on his back and support the lower limbs
 - in case of a chest injury, it is advisable to place the patient in a semi-sitting position
- Provide the patient with thermal comfort
- Treat other visible injuries



Bruise (hematoma)

Rupture of a blood vessel,
spillage of blood into the subcutaneous tissue



<https://zdravi.euro.cz/leky/hematon-prkotina-i-zivot-ohrozujici-zalezitost/galerie-106670-8>

FA:

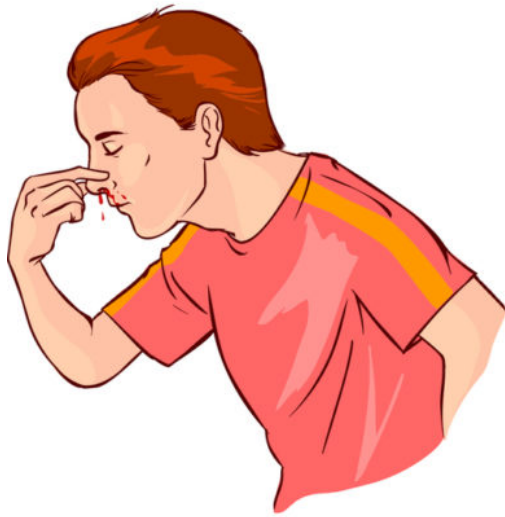
Light compression with a cold lining
(narrowing of blood vessels, reduction of swelling)

Special Types of Bleeding

- From the nose
- From the ear
- From the mouth
- Injury to mouth, lip, tooth
- Hematemesis
- Hemoptysis

- From the rectum
- From the genitals

Nosebleed



<https://www.geelongmedicalgroup.com.au/2018/03/what-to-do-when-your-nose-bleeds>

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Nosebleed

- Hypertensive patients, patients with impaired coagulation (blood clotting),
- Young children: there is a risk of inhaling blood.

FA:

- SSSABC
- Sitting in a forward bend, mouth breathing
- Squeezing the nasal wings for 5-10 minutes
- Cold gauze on the back of the head and/or on the forehead

EMS: impaired consciousness, heavy constant bleeding,
children at risk of aspiration

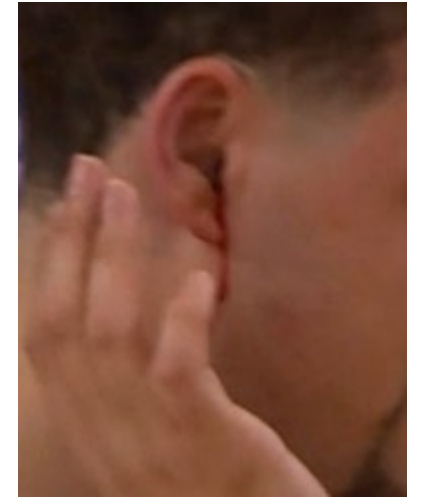
Bleeding from the ear

- Head or eardrum injury
- Cerebrospinal fluid may leak

FA:

- SSSABC
- Attach a sterile cover to the outer ear
- Conscious patient in a semi-sitting position with his head tilted to the affected side
- ENT examination

- Do not tampon the ear canal !!!



Luxated tooth

FA:

- Bite tampon = pressure tamponade
- Compression must take longer than 20 minutes

- Dental treatment
- Luxated tooth for replantation:
 - in a sterile normal saline
 - in milk
 - in the oral cavity in saliva if there is certainty of ingestion





Hematemesis

- It is a bleeding from the digestive tract - vomiting blood
- **ATTENTION:** there is a risk of blood aspiration !!!

FA:

- Patient in a semi-sitting position - prevention of aspiration
- Bent lower limbs - relief position
- Call EMS !!!
- In case of impaired consciousness, we place the patient in the recovery position (blood can flow out of the mouth) and closely monitor the ABC - in case of respiratory and circulatory arrest we start CPR (we do not take breaths from mouth to mouth)

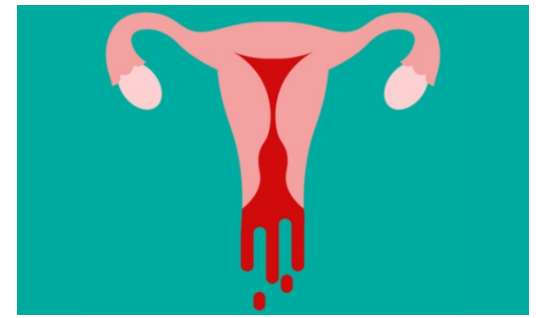
Hemoptysis

- Bleeding from the lungs
- Typically, coughing up bright red and frothy blood
- Many causes, insignificant in first aid

FA:

- SSSABC
- Calm the patient
- Half-seat
- Call EMS

Vaginal Bleeding



<https://www.1mg.com/articles/vaginal-bleeding-what-is-normal/>

In pregnancy

- Abortion
- Placental disorders
- Childbirth

No connection with pregnancy

- Blood clotting disorders
- Tumors of the uterus
- Injuries of genitals

Acute situation

- Abortion - bleeding
- EUG - abdominal pain, shock

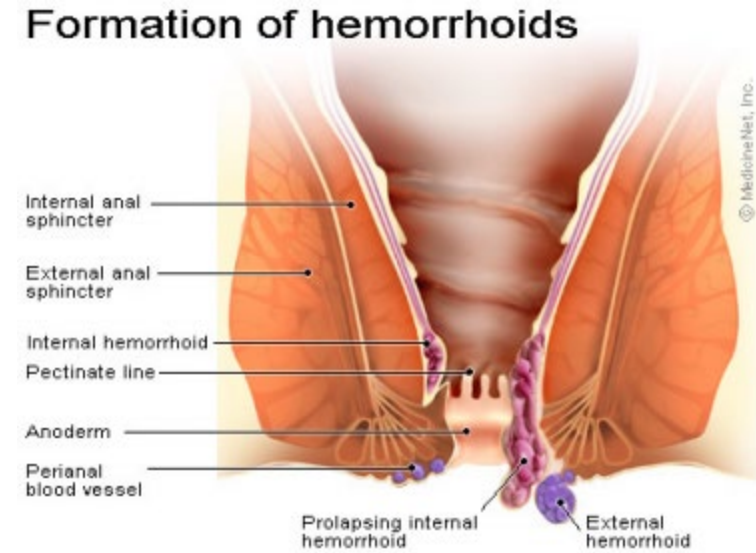
Common symptoms:

- atypical course of menstruation
- amenorrhea 6 - 8 weeks
- positive pregnancy test

FA: SSSABC hospitalization, gynecological examination

Bleeding from the rectum

- Bright red blood
 - External hemorrhoids
 - Anus crack
- Dark blood
 - Internal hemorrhoids
 - Diverticulitis, colitis, colon tumor
- Digested blood = melena (greasy, tarry)
 - Bleeding from the upper part of the digestive tract
- FA: SSSABC ... seek medical aid



<https://emedicine.medscape.com/article/81039-overview>

Learning outcomes

- Student knows the manifestations of internal bleeding.
- Student knows the basic causes of bleeding from body orifices.
- Student is able to describe first aid for nosebleeds.

Literature

- AUSTIN, Margaret, Rudy CRAWFORD and Barry KLAASSEN.
First aid manual: the Authorised Manual of St John Ambulance, St Andrew's First Aid and the British Red Cross. Revised 10th edition. London: DK, 2016. 288 pp. ISBN 9780241241233.

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