

Bleeding

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Fundamentals of First Aid and Emergency Care for
Radiography

Medical Technical Radiology Department

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Student Learning Outcomes (SLOs):

By the end of this lecture, students will be able to:



Introductions



Bleeding is defined as the loss of blood. If any organ or blood vessels that contain blood is damaged, blood can flow freely inside or outside the body.

Bleeding can range from minor cuts to severe, life-threatening injuries. Prompt and effective management of bleeding is crucial in emergency situations to prevent further complications and save lives.



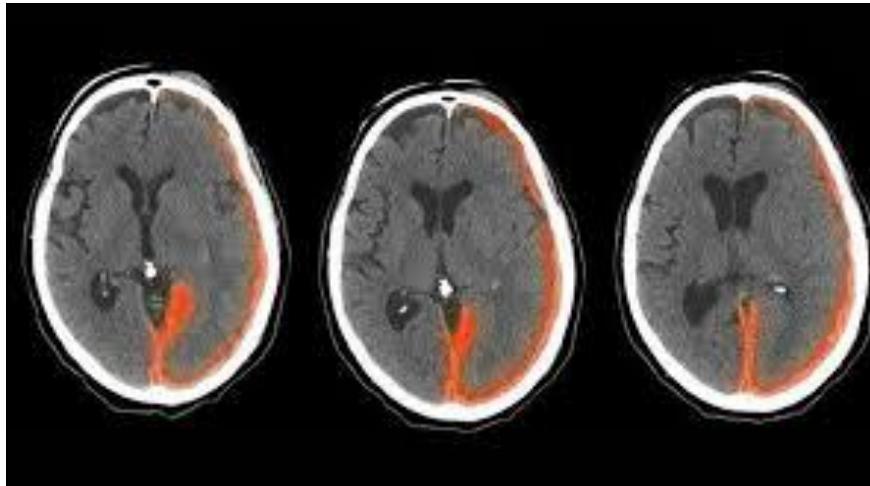
The average adult has between 8 – 12 pints (4.5– 6.5 liters) of blood, dependent on their size (but the rule doesn't work for someone who is overweight).

Children have less blood than adults and as such cannot afford to lose the same amount.

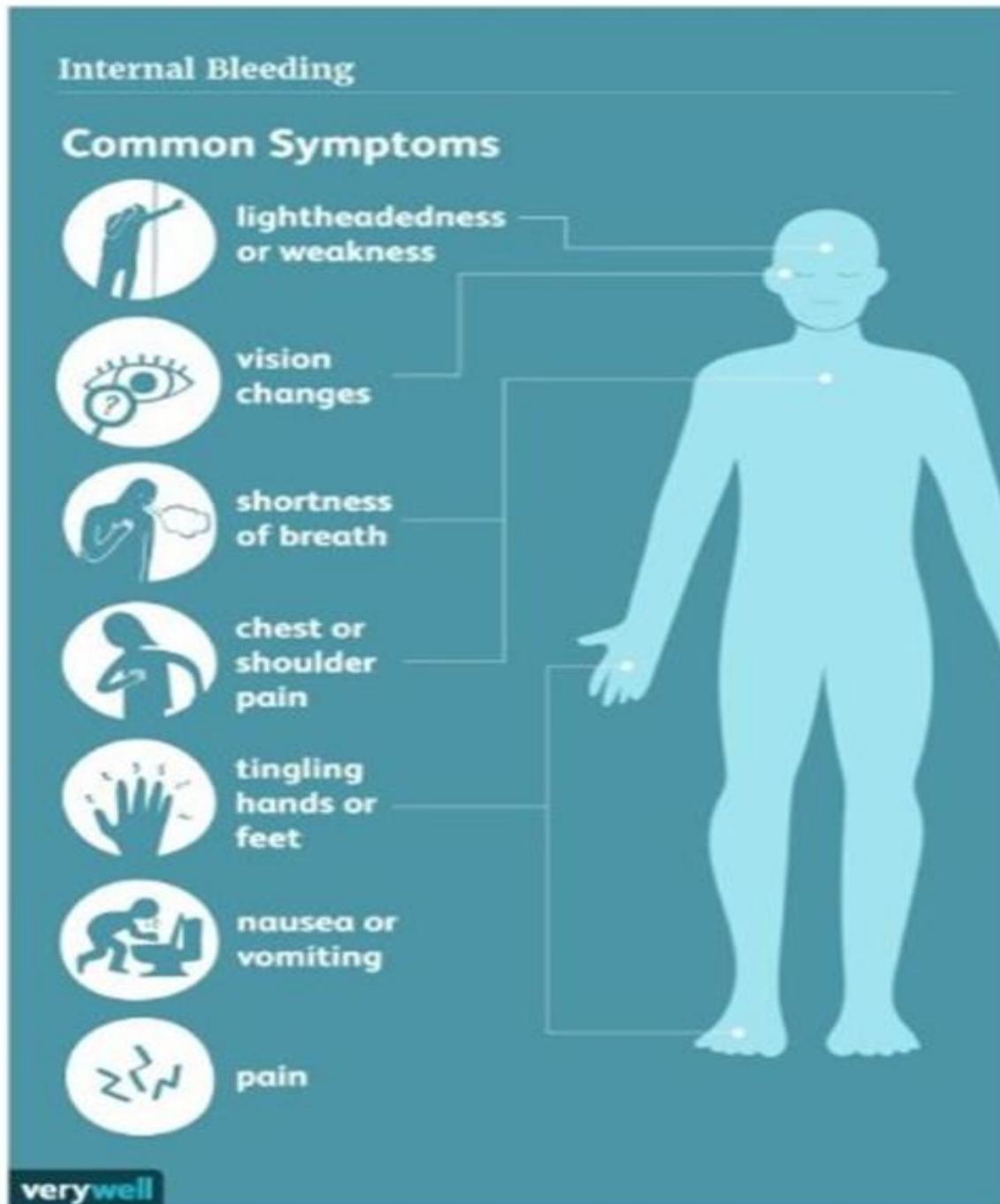
Causes of bleeding



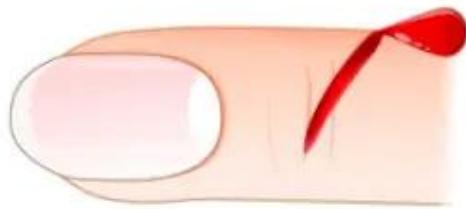
- Traumatic bleeding
- Medical condition (diseases)
- Medication use



Signs and symptoms



Types of Bleeding



CAPILLARY BLEEDING

Minor and involves small blood vessels near the skin's surface



VENOUS BLEEDING

Occurs when blood flows from a vein.
It is characterized by a steady flow of dark red blood.



ARTERIAL BLEEDING

Most severe type of bleeding and results from an injury to an artery.

Types of bleeding

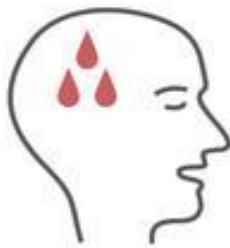
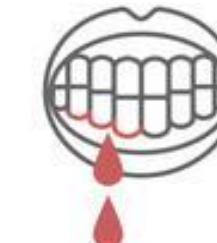
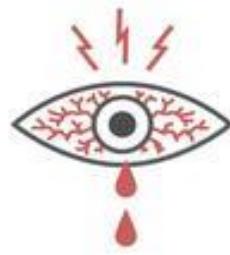
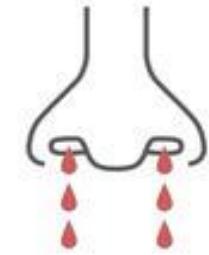
Internal bleeding (within the organ).



External bleeding:

when blood flow from break in the skin or a natural body opening, such as the vagina, rectum, mouth, nose, or ears.

— BLEEDING —



Types of external bleeding



1. **Contusion** – A bruise caused by ruptured capillaries bleeding under the skin. damage, such as a fracture.
2. **Abrasion** – A graze. The top layers of skin are scraped off, usually as the result of a friction burn or sliding fall.
3. **Laceration** – A rip or tear of the skin.
4. **Incision** – A clean cut. Usually caused by a sharp object such as a knife.
5. **Puncture** – A stabbing wound. Could be as a result of standing on a nail or being stabbed
6. **Gun Shot** – Caused by a bullet or other missile, which may be travelling at such speed as to drive into and then exit the body
7. **Amputation** – Complete or partial separating of a limbs.

Hemorrhage/ Do and Don'ts



- **Do not:** remove the cloth when bleeding stops. Use an adhesive tape or clothing to wrap around the dressing and hold it in place. Then place a cold pack over the wound.
- **Do not** look at the wound to see if bleeding has stopped. This can disturb the wound and cause it to begin bleeding again.



Don'ts



- Do not remove the cloth from the wound, even if blood seeps through the material. Add more material on top, and continue the pressure.
- Do not move anyone with an injury to the head, neck, back, or leg



Don'ts

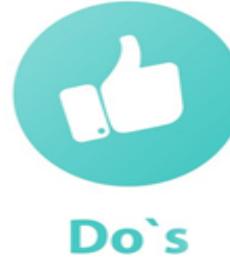


Do not allow the victim to eat or drink anything, as he may need anesthesia.

Do not apply pressure to an eye injury



Do's



Do use **SEEP** or **RED** to assess and prevent bleeding.

The aims of treatment for external bleeding are first to stop the bleeding, to prevent the person going into **shock** and then to **prevent infection**.

Remember the S.E.E.P steps of treatment:



S: Sit or lay – Sit or lay the person down

E: Examine – Examine the wound, look for foreign objects and note how the wound is bleeding.

E: Elevate – Elevate the wound. Ensure that the wound is above the level of the heart, using gravity to reduce the blood flow to the injury.

P: Pressure – Apply direct or indirect pressure to stem bleeding.



The **RED** steps of treatment

R: Reassure the victim and giving rest to affected part.

E: evaluate and examine the wound

D: direct pressure to the wound