



FIRST AID

Subject: FUNDAMENTALS OF NURSING

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Wounds & Bleeding

Wounds

Definition:

A break or cut in the continuity of any body structure is known as a wound which is caused by an internal or external force caused by physical means.

Classifications:

❖ Status of skin integrity:

- **Open** – Is one in which there is destruction of the skin or mucus membrane, thus opening the underlying tissues to the open air. Eg: Surgical incision, vein puncture or gun shot wound.
- **Closed** – Is the one in which there is no break in the continuity of the skin or mucus membrane. It may cause damage to the tissues under the skin or mucus membrane.



Wounds & Bleeding

Classification:

❖ Cause of the wound:

- **Intentional or surgical wound:** Is one which produced for specific purpose. Eg: Introduction of a needle into body parts.

❖ Severity of injury:

- **Superficial (Abraded) wound:** Is the one in which only the epidermal layer of the skin is involved. Eg: A child get a scrape when he falls on his knees on a cement floor.
- **Penetrating wound:** Is the one in which the epidermal layers of the skin, dermis & deeper tissues or organs are involved. Eg: A bullet which enters the chest.
- **Puncture or stab wound:** Is one in which there is an injury to the deep tissues, but there is only a very small opening on the surface.

Wounds & Bleeding

Classification:

❖ **Cleanliness / contamination:**

- **Clean wound:** Is one which does not contain pathogenic organisms. Eg: closed surgical wound.
- **Clean contaminated:** Is a wound made under aseptic condition but involving body cavity that normally harbours microorganisms. Eg: Surgical wounds entering the body cavities.
- **Contaminated wounds:** Is one in which there is a great likelihood of pathogenic organisms invading the wound. Eg: Accidental wounds.
- **Infected wound or septic wound:** Is one in which pathogens have invaded, producing clinical signs of infection. Eg: Ruptured appendix.
- **Colonized wound:** Is a wound that contains multiple microorganisms. Eg: Pressure sores.

Wounds & Bleeding

Classification:

❖ Descriptive qualities:

- **Lacerate wound:** Is the wound in which tissues are torn apart & has irregular edges. Eg: cut by a saw.
- **Abraded wound:** Is a superficial wound involving scraping or rubbing of skin surface by friction. Eg:wound often occurs from fall.
- **Contused wound or closed wound:** In this there is no break in the skin. Externally wound is characterized by swelling, discoloration & pain. Eg: wound caused by a blow to the body by a blunt instrument.
- **Incised wound:** A wound is a clean cut & has smooth regular edges. Eg: A wound made during surgery using a scalpel.



Wounds & Bleeding

Bleeding

Definition:

Bleeding, technically known as **hemorrhaging**, is the loss of blood escaping from the circulatory system.

Bleeding can occur internally, where blood leaks from blood vessels inside the body, or externally, either through a natural opening such as the mouth, nose, ear, urethra, vagina, or anus, or through a break in the skin.





Wounds & Bleeding

Bleeding

Classification of bleeding

- ❖ Capillary Bleeding
 - ❖ Venous Bleeding
 - ❖ Arterial Bleeding
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Wounds & Bleeding

Bleeding

❖ Capillary Bleeding

Capillaries are the smallest blood vessels in your body.

They are about as thin as the hairs on your head. When a minor scrape or cut opens some capillaries, the bleeding is almost always very slow and small in quantity. Your body's natural clotting mechanism is able to stop most cases of capillary bleeding within seconds to minutes. Blood oozes from the wound

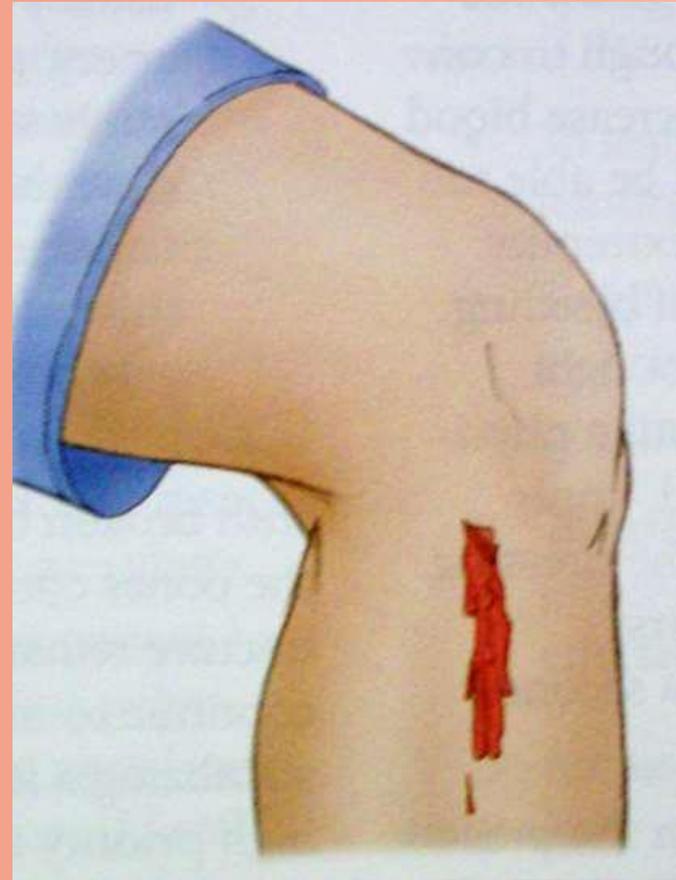


Wounds & Bleeding

Bleeding

❖ Venous Bleeding

Deep cuts have the potential to cut open veins. A cut vein typically results in a steady but relatively slow flow of dark blood.



Wounds & Bleeding

Bleeding

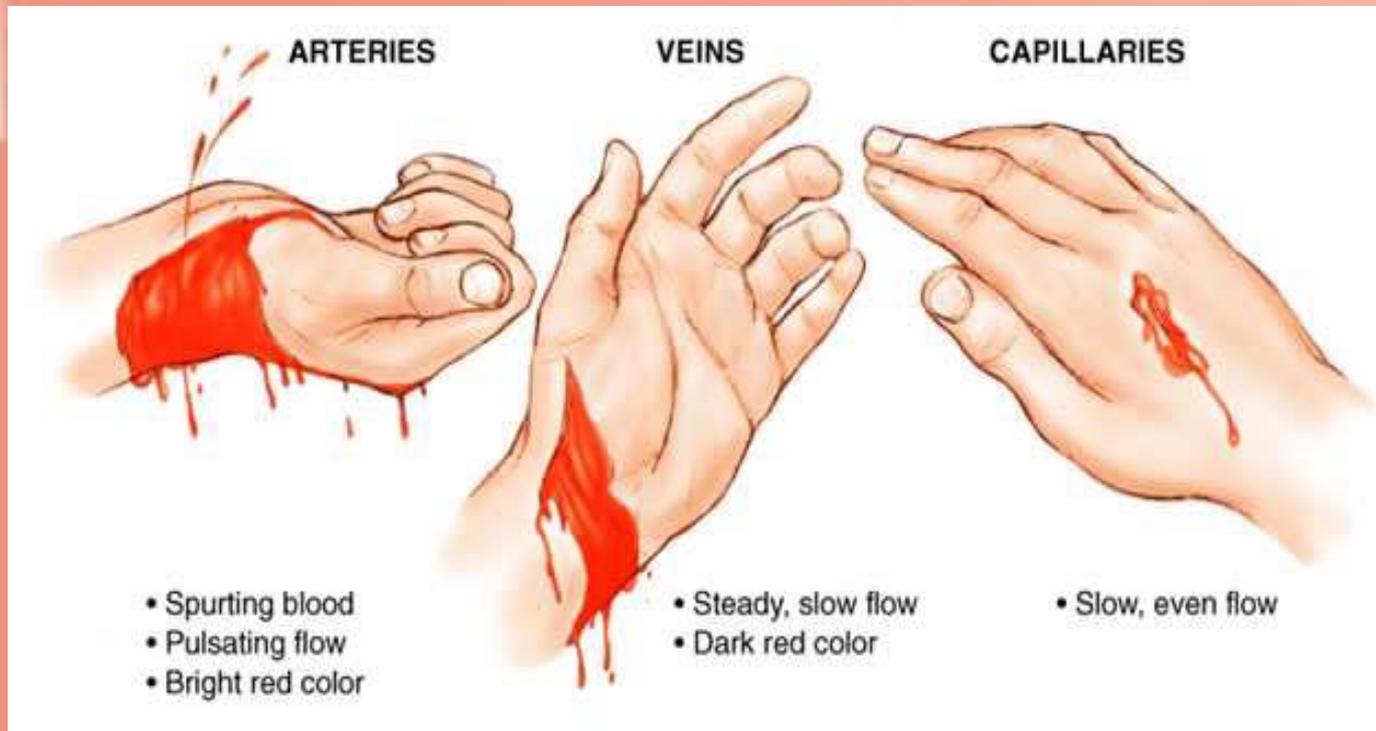
❖ Arterial Bleeding

This is the least common and most dangerous type of bleeding. It involves bright red blood that comes out in large volume, and in spurts. In most cases of arterial bleeding, direct and extremely firm pressure on the wound is the best way of stopping it. If direct pressure is not applied, a severe arterial wound can cause you to bleed to death within a few minutes.



Wounds & Bleeding

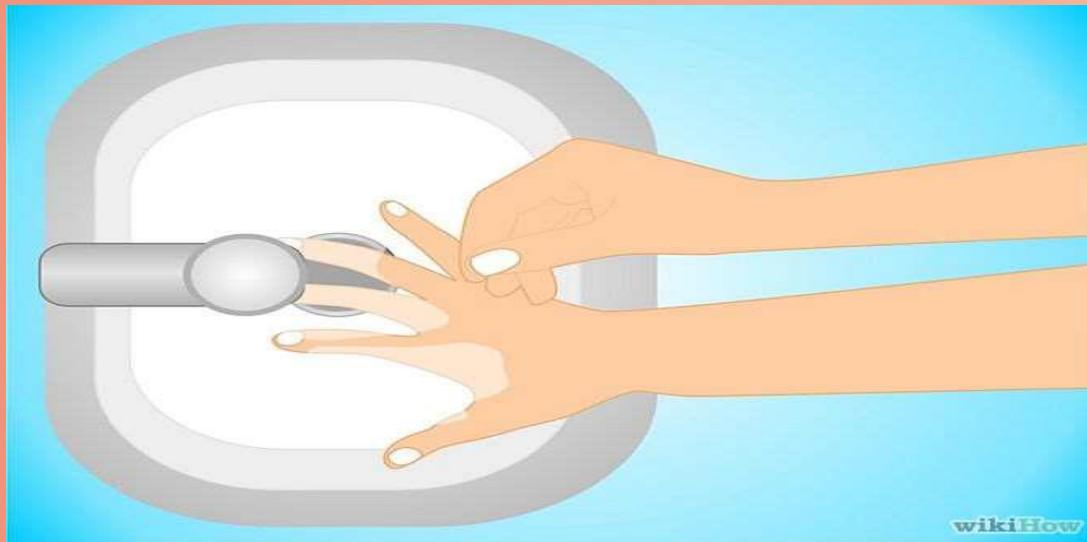
Bleeding Comparison



Wounds & Bleeding

Management

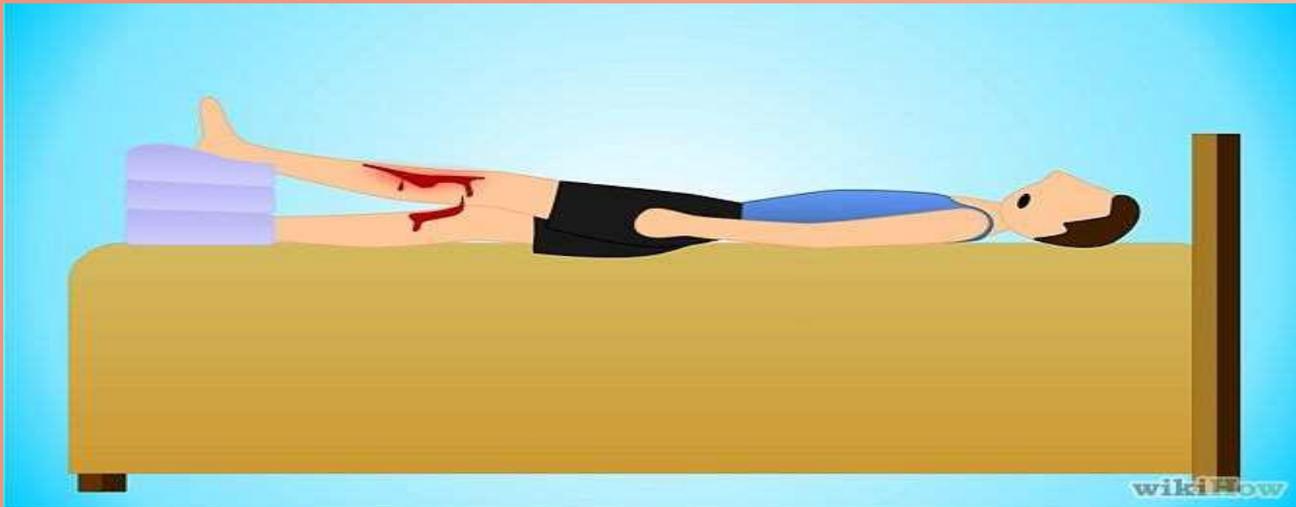
1. Sanitize your hands if you can. If you have them, put on surgical gloves. This will help to prevent infection to the injured person.



Wounds & Bleeding

Management

2. Lay the injured person down flat and elevate the legs or place a pillow under the body so that the trunk is just slightly higher than the head. If the wound is in a limb, elevate the limb.



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Management

3. Cover the victim with a blanket, if possible, to keep body heat in.



Wounds & Bleeding

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4. Remove any debris or dirt from the bleeding area without removing any large chunks that may have caused the damage.



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Management

5. Apply pressure on the bleeding area to stop severe bleeding. If you have a clean cloth or bandage, use it. Otherwise, use whatever you have, including your hands. Hold the pressure for 20 minutes without shaking the hands.



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Management

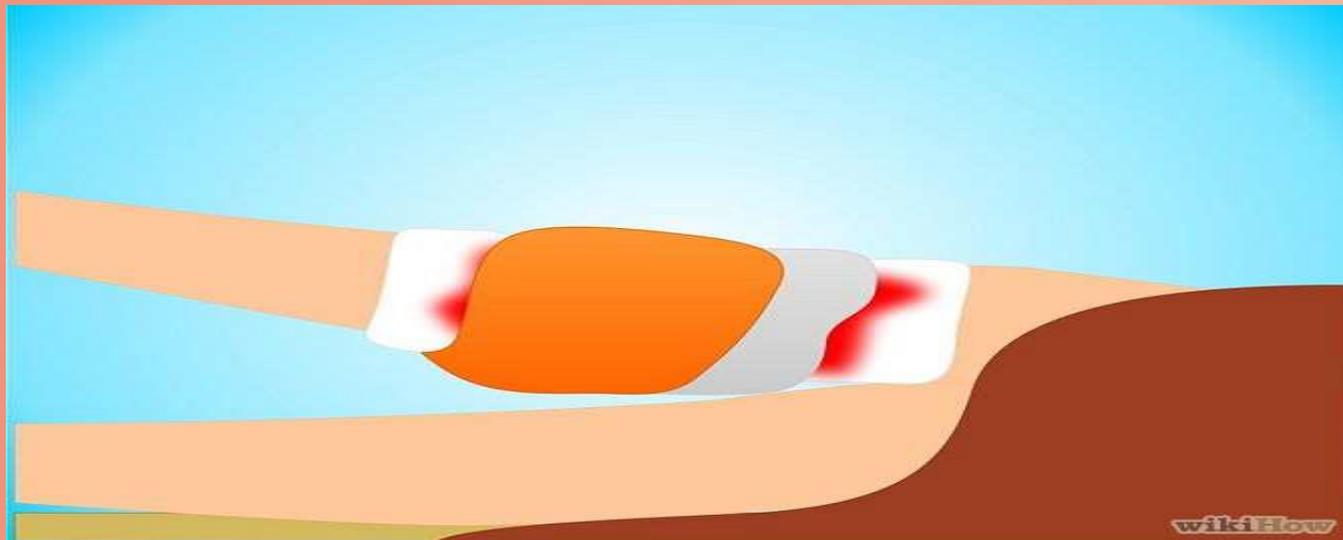
6. Place a pad over the wound tightly with the edges of the wound held together for a gaping wound. Wrap the wound with a bandage if you have one. If not, use a clean cloth or whatever else you have. Bind it with adhesive tape.



Wounds & Bleeding

Management

7. Add cloths or any other absorbent material you might have if the bleeding does not stop and is coming through the bandage.



Wounds & Bleeding

Management

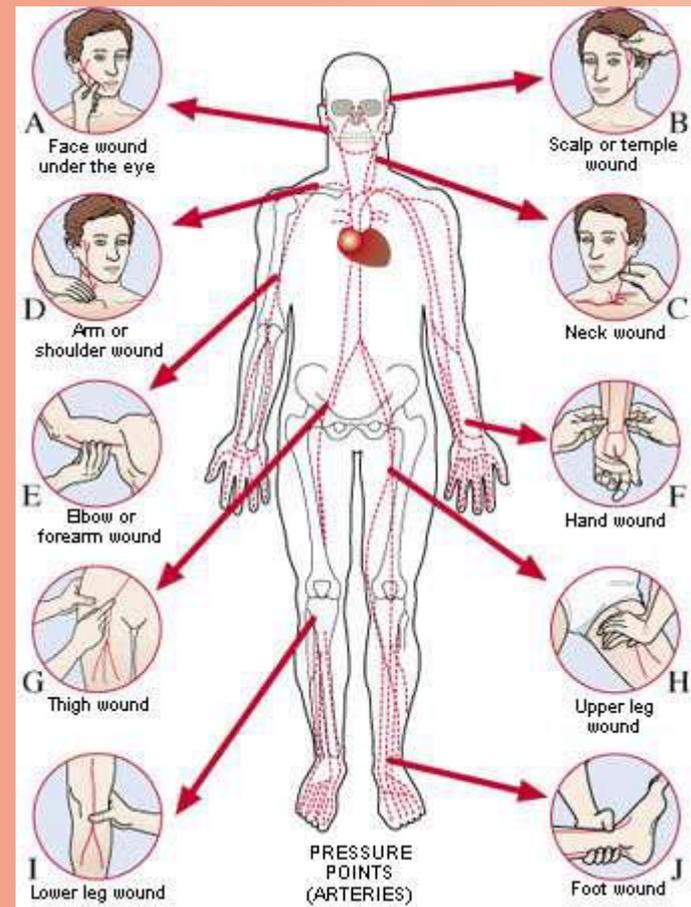
8. Place an ice pack on the wounded area. This will help to constrict blood vessels, which will help to stop bleeding.



Wounds & Bleeding

Management

9. Locate the artery nearest to the wound and apply pressure to it, keeping your fingers flat and against the bone if the bleeding does not stop.



Wounds & Bleeding

Management

10. Get the injured person to the emergency room as quickly as you can when the bleeding has stopped.





Thank
You