jäL=ko@Haemorrhage

- **jäegRo**

  nsgL; #f/kja ewya #f/kj.kSo /kk;ZrsA

  rLekn~ ;Rusu laj{;a jäa tho bfr fLFkfr%AA lq-lw-14@45

- **vfrizek.k esa jäfoL=ko.k fu"ks/k**

  “ks’knks’ks ;rks jäs u O;k/khjfrorZrsA

  Lkko'ks’ks rr% LFks;aZ u rq dq;kZnfrdzee~AA lq-lw-14@44

- O;kf/k ds “keu ds fy, jäfoL=ko.k fd;k tkrk gS] blesa dqN ek=k esa nwf’kr jä “ks’k jgus ij l'kaeu mik; }kjk Bhd djuk pkfg, D;ksafd] vYi ek=k esa vof'k’V nwf’kr jä O;kf/k mRi™k djus esa vleFkZ gksrk gS] ijarq jä dk vfrL=ko u gksus nsA

HAEMORRHAGE

Definition

- Haemorrhage means escape of blood outside its containing vessel.

- The term hemorrhage refers to excess loss of blood due to rupture of blood vessel.

Classification of hemorrhage -

A) Depending upon nature of vessels-

- Arterial hemorrhage - bright red color
- Venous hemorrhage - dark red color
- Capillary hemorrhage - red color

B) Depending upon Timing of hemorrhage-

- Primary - at the time of injury or surgery
- Reactionary – bleeding within 24 hours (usually 4-6 hrs.) from hemorrhage due to hypertension, coughing, sneezing.
- Secondary - occurs after 7-14 days of surgery , it is due to infection. Common after hemorrhoids surgery, GI surgery.

C) Duration of Hemorrhage-

- Acute hemorrhage – occurs suddenly like oesophageal variceal bleeding due to portal hypertension
- Chronic hemorrhage – piles, duodenal ulcer , hematuria.

D) Depending upon nature of bleeding-

- External or visible bleed – soft tissue injuries, bleeding from the limb vessels, wound, nose etc.
- Internal – blunt or penetrating trauma eg: spleen rapture

E) Degree of Hemorrhage –

Degree of hemorrhage is classified into 4 classes

- Blood volume loss < 15%
- Blood volume loss b/w 15-30%
- Blood volume loss b/w 30-40%
- Blood volume loss >40%

- **Note-** Shock is due to sudden loss of blood volume or loss of fluid from vascular space, it is caused by vomiting, diarrhea, dehydration loss of blood etc. will cause decrease in filling pressure of right heart & decrease systemic pressure of left heart. So this causes decrease in systemic arterial pressure resulting in shock.
- **Clinical features –** All sign & symptoms of hypovolemic shock depend upon loss of fluid & blood which is classified,
- When blood loss is less than 750 ml it is called as mild shock. The clinical features are that extremities become pale & cool, sweating in forehead, thirst but urinary output, normal pulse rate, blood pressures is normal.

- Blood loss of 800-1500 ml results in moderate shock. Clinically, pulse rate is less than 100/min. the systolic pressure may remain normal but diastolic pressure may increase. There will be oliguria & extremities look pale.
- Blood loss of 1500-2000 ml results in systolic & diastolic pressure fall, pulse is thread & rate is 120/min, respiratory rate is < 20/min, low urinary output, patient is pale & drowsy.
- When blood loss is more than 2000 ml result in severe shock. Clinically blood pressure is unrecordable or low, low urinary output, rapid pulse, the peripheral extremities are cold, absence of peripheral pulse & lastly result in multi organ failure.

- **Management-** 1. Hospitalization
  2. blood transfusion
  3. control of bleeding
  4. IV
- **Treatment of hemorrhage in surgery**
- **(Method of haemostasis)**

1. Pressure & packing 2. Tourniquets
3. Application of ligatures 4. App. of artery forceps
5. Position & rest 6. Cauterization (diathermy)
7. Application of bone wax. When bleeding from cut edges of the bone.


Thank
You...