

SHOCK

Shock is a clinicopathological syndrome with varied aetiologies & it presents with the following clinical features like

- (i) Cold body with perspiration.
- (ii) The patient is in a restless position (due to less O_2 perfusion in brain)
- (iii) Level of consciousness goes down.
- (iv) Air Hunger
- (v) Fall in BP
- (vi) Rise of Pulse Rate.
- (vii) Fall in urinary output
- (viii) Core temp of the body is raised (rectal) (nearly around $38-39^\circ$)
- (ix) Body's temp. is $\downarrow$ $<30^\circ$.
- (x) Colour of the skin is pale (dusky)
- (xi) Collapsed Peripheral veins
- (xii) Central Venous Pressure (CVP) goes down.

[It is basically the right atrial pressure. It is around 10-12 cm of water level]

CVP is an imp. monitoring system of critically ill pt. in I.C.U. setup.

Whenever there is loss of blood volⁿ from the main vascular channels

Cardiac Output $\downarrow$ s

$\downarrow$
CVP $\downarrow$ s

↓
Perfusⁿ pressure of O₂ in the tissues goes down
but it matters more to heart & brain

Natures First Aid (First Aid of The Body)

Peripheral vasoconstrictⁿ develops

↓
Peripheral vascular resistance ↑s

↓
Arterial Pressure rises to maintain the O₂ perfusⁿ of tissues.

↓
Reversal of shock.

CLASSIFICATION

Type

① Reversible / Irreversible Shock.

Reversible is the one c/cb reversed to normal

Irreversible cannot be reversed to normal

② Vasovagal shock

It occurs d/t seeing of horrible scenes
In this case there is pooling of blood
in splanchnic vessels. (they dilate)

Treatment → The patient should lie down &
limbs t/b elevated

③ Neurogenic Shock

It occurs d/t acute pain

sudden frightening news.

There is pooling of the blood in the limb muscles and dilatation of splanchnic arterioles pad.
($\downarrow$ d/t low venous return & arterial pressure $\downarrow$)

25/7/07

④ Haemorrhagic shock

It occurs d/t unwanted bleeding d/t

- surgery
- trauma
- Internal bleeding / rupture of blood vessels.
like bleeding from peptic ulcer
Tubercular lung
Colonic carcinoma.

Treatment - Detect the cause of bleeding

Control the bleeding

Resuscitate the patient

Blood transfusion.

Finally follow up treatment in the form of treating the underlying cause.

Shock in Patients of Burn

It depends upon severity of burn i.e. area of burn

Causes

Immediate causes - severe pain

- D/t burning of skin ^{2nd tissue} there w/b charring of blood also
- loss of fluid & plasma from the surface

Pain relief is imp — analgesics
sedatives t/b given.
Rapid iv. fluid to bring
the pt. out from the shock.

Blood transfusⁿ is required when the extent
of burn is very high.

Shock m/b d/t delayed reasons like Necrosis
septicemia.

Causes — Dehydratⁿ d/t gastroenteritis (Vomit + m)
— loss of fluid from body leading
to shock.

— D/t inflammatⁿ of following strct^s
like Pleura

Peritoneum

Pericostum Mediastinum

Retroperitoneal

Endotoxin Gram-ive shock

Bacteria like e.coli produce toxin → shock

Anaphylactic shock

D/t hypersensitivity to drugs like penicillin.

Treatment of shock in general

- ① Detect & remove the cause.
- ② Replacement of loss blood volⁿ.

- ③ Arrest of haemorrhage
- ④ Blood transfusⁿ if required.
- ⑤ In case of burn depending upon the severity — blood & plasma transfusⁿ.
- ⑥ Endotoxic & Bacteremic shock requires rigorous treatment in form of — iv fluids
 - blood transfusⁿ
 - Antibiotics
 - Proper monitoring in ICU setups.
- ⑦ In case of burn — Relief pain

Pt. is frightened — Sedatives to sedate

Anxiolytic drugs
(↓ anxiety).

If pt. requires O₂ therapy give O₂ therapy.