

05/12/24

TYPES OF SHOCK & THEIR TREATMENT

1) Cardiogenic Shock.

- characterised by severe reduction in cardiac output due to primary pump failure leading to systemic hypoperfusion, organ dysfunction & metabolic disturbances.
- Dopamine is used in patients with cardiogenic/septic shock where it increases BP and urine outflow. It is administered by IV infusion (0.21 mg/min) which is regulated by monitoring BP & rate of urine formation.
- Use of inotropic sympathomimetic drugs in cardiogenic shock is tricky, because they may increase cardiac workload.
- DA increases cardiac contractility without causing significant tachycardia.
- Also improves renal blood flow and may help to raise BP.
- Dobutamine has relatively more selective inotropic effect.

2) Neurogenic Shock.

- In drug overdose, trauma
- Acute hypotension attending spinal epidural anaesthesia, drug overdose & neurogenic shock is due to loss of sympathetic vasoconstrictor tone.

- treated fluid infusion, evaluation of legs to facilitate venous return, O_2 inhalations and monitored IV infusion of a sympathomimetic like mephentermine or ephedrine which causes vasoconstriction as well as counteract bradycardia.

3) Anaphylactic shock.

- Adrenaline 0.5 mg injected is promptly is the drug of choice in anaphylactic shock
- It is not only reverses BP but also ~~counteracts bradycardia~~ bronchospasm and laryngeal edema. That may accompany
- Because of this profile of action as well as rapidity of onset.
- Adr is the only life saving measure.

4) Hypovolemic shock.

- severe diarrhoea, vomiting, burn etc.
- Urgent measures are directed to restore & maintain bld volume, bld pressure & perfusion of vital organs.
- Volume replacement & treatment of underlying cause are the primary modalities.
- continuously monitored IV infusion of sympathomimetic pressure agents like dopamine, mephentermine, phenylephrine or Noradrenaline is often used to elevate BP & maintain cerebral circulation

The risk in using vasopressors is that while causing raise in BP they may reduce perfusion of kidney & other vital organs.

5) Septic shock.

- Gram negative septicemia, severe infection.
- High dose glucocorticoid therapy has been abandoned, because it worsens the outcome.
- However many such patients have adrenal insufficiency.
- Some studies have documented beneficial effects of low dose (hydrocortisone 100mg shown in infusion for 5-7 days) therapy in patients who are adrenal deficient and who don't respond adequately to fluid replacement & vasopressors.