

Diluted in NS/5%D

Loading dose - 50µgram/kg over 10 mins

(20mg in 50ml 5%D = 0.4mg/ml = **400µgram/ml**)

0.125ml of this in 10ml 5%D over 10 minutes

Maintenance – 0.375 – 0.750µgram/kg/min

3.75 ml / hour = 0.5µgram/min for 50kg patient.

→ **Amrinone** is also used as ionotrope

Bolus - 0.75µgram/kg over 2 minutes

Maintenance - 15µgram/kg/min

→ **Soda bicarbonate**

If there is profound acidosis maintain pH > 7.2

→ **Mechanical circulation assist devices** if available in patients who are being planned for definitive procedure like emergency CABG or PTCA.

3. Treatment of arrhythmia – as discussed in chapter 1.

Treatment of myocardial infarction.

(This is the most common cause of cardiogenic shock)

B. HYPOVOLAEMIC SHOCK

Causes - Gastroenteritis, decreased intake or blood loss

Management

IV FLUIDS -

- ◆ **Ringer-lactate** 500ml in the first 1/2 hour
Ringer-lactate or normal saline has to be continued until urine output is established or BP restored (CVP is a better guide)
- ◆ **Blood transfusion** for haemorrhage after giving the above treatment.
- ◆ If urine output is not established after adequate hydration, impending acute tubular necrosis must be suspected and
 - ◆ Inj. Frusemide 200mg IV stat or
 - ◆ Inj. Mannitol 200ml IV stat is given in an attempt to open up the kidneys

Other drugs used

9. ACE inhibitors

If cardiac failure/ LV dysfunction / previous MI is present

Enalapril 5 - 20mg

Ramipril 2.5 - 10mg.

Avoid in hypotension / renal failure / hyperkalaemia.

10. Calcium channel blockers:

- Used **only** when beta-blockers are contraindicated and there is ongoing chest pain.
- To control ventricular rate in AF.
- Also used in non Q MI.

Avoid in CCF and LV dysfunction.

Diltiazem – bolus 0.25 mg/kg IV over 2 –5 min for arrhythmias.

Infusion dose is 5 – 15mg / hour;

250mg in 250 ml = 1ml contains 1mg

Infusion rate 5 – 15 ml / hour or microdrops /min **or**

Diltiazem PO 30 - 60mg Q8H

11. Amiodarone

For atrial and ventricular arrhythmias.

Bolus - 150mg in 20ml 5% D over 5 -15 minutes

Infusion - Inj. Amiodarone 1amp = 3ml =150 mg

6amp in 500 ml of 5% Dextrose

Slow Loading dose 1mg / min

32 microdrops/min to for 6 hours followed by

Maintenance infusion 0.5mg/min

(17 microdrops/min for 18hours)

12. Lidocaine

Bolus - 1 mg / kg bolus repeat after 5 min 0.5 mg / kg

(Upto total 3 mg / kg can be given)

Infusion - 2- 4 mg /minute infusion over 24 hours

for ventricular tachycardias or significant ectopics.

(Inj. Xylocard 3.0 gm in 500 ml = 1ml contains– 6mg

i5 microdrops = 1.5mg and 10 microdrops =1mg.

- Total parenteral nutrition is expensive and has its own problems.
- Enteral nutrition is started with either premixed preparations or locally available freshly prepared (using items like rice, dhal, oil, egg etc..)
- Monitor intake and output (volumes) of the patient and accordingly adjust input next day.
- Electrolytes and renal function to be monitored periodically (alternate days)
- Salt, Vitamins, mineral and trace elements supplementation to be given.
- Care of the eyes to prevent exposure keratitis – Neosporin eye ointment and eye shields to keep eyes closed
- Care of the back to prevent bedsores
 - Frequent change of position (2nd Hourly)
 - To keep skin dry by using talcum powder
 - Avoid folds in the bed sheet.
 - Nurse on a water/air bed.
- Chest physiotherapy and intermittent throat suction to clear secretions
- Maintain oral hygiene by wash/suction
- Nurse in lateral position to avoid aspiration
- Care of the endotracheal tube – Periodic sterile suction and ideally periodic transient cuff deflation.
- Care of the IV access
 - Look for evidence of infection.
 - Always follow aseptic precautions.
 - Change once in 2-3 days or if there is evidence of cellulitis or thrombophlebitis.
 - Avoid hypertonic solutions. Also avoid extravasation of hypertonic solution, contrast material and drugs.

μdrops/minute can be increased up to 60

μdrops/minute



Mechanical ventilatory support is required

9.Mannitol

Repeated convulsions can lead to cerebral oedema and this can be treated by Mannitol 200ml IV stat and 100ml IV Q8H or Dexamethasone 4mg IV Q6H to decrease oedema

10. Find out the specific cause for status epilepticus and treat accordingly.

Suggested reading

NEJM 1998; 338; 970.

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Clinical Principles of Medicine

1. Common things occur commonly.
2. Think of uncommon manifestations of common conditions rather than common manifestation of uncommon condition.
3. If what you are doing is working, keep on doing it.
4. If what you are doing is not working, stop doing it.
5. If you don't know what to do, don't do anything.
6. Cure rarely, control mostly and console always.

Modified from Matz R.