

Shock

micro drip study guide

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Analgesia


- Pure mu opioids (methadone, fentanyl, sufentanil)
- Partial agonist (buprenorphine)
- Ketamine IV CRI
- 2% Lidocaine IV CRI (dogs)
- Gabapentin
- No NSAIDs



The good thing about analgesia for our patients if we stick to a multimodal mindset which I hope we all do we usually are going to be able to use lower doses of the respective drugs and it goes without saying because shock is a state of hypoperfusion where oxygen is not being delivered to tissues typically because of cellular energy production deficits we don't want to give them a class of drugs that alters perfusion significantly so one of the common questions I always get asked is "can I give an nsaid?"

I would not use an nsaid because of the hypoperfusion issues and the risk for gastric ulceration and gastrointestinal perforation and acute kidney injury I would say we have a lot of other good alternatives that while we're dealing with shock we're gonna avoid the nsuids. Consideration of that class of medication once we're no longer in shock is another topic but when we're in the midst of treating a shock patient let's just stay away from the nsuids.

Furosemide	2-4 mg/kg IM or IV bolus PRN +/- CRI (12 mg/kg/d max)
Oxygen	
Nitroglycerin / Nitroprusside	0.25-1.0" TD q8-24 hr x 1-2 days / 1-10 ug/kg/min IV CRI
Sedation	Butorphanol 0.1-0.2 mg/kg IV or IM PRN
Pimobendan	0.25 mg/kg PO q8-12 hr
Dobutamine	If cardiogenic shock
Diltiazem / Digoxin	If concurrent Afib



Now I told you we're gonna talk about cardiogenic shock and I like to use acronyms that are in publication. They stick to my brain they're FONS P and FONS D for dogs which you see here so FONS is furosemide oxygen nitroprusside or nitroglycerin and sedation.

Now not every patient in cardiogenic shock needs every letter but we're talking about the four basic components of cardiogenic shock treatment. Furosemide is a diuretic oxygen therapy nitroprusside or nitroglycerin and sedation and then we have the P. or the D's. P is for Pimobendan. Obviously we are familiar with Vetmedin and the functions of this medication to improve contractility and its benefits in patients for example of congestive heart failure and then we have D. We have two D's actually Dobutamine and Diltiazem or our old friend Digoxin. So when do we reach for Dobutamine? We reach for Dobutamine in our cardiogenic shock patients whose contractility is in the gutter.

We can reach for Diltiazem or Digoxin in patients with [inaudible] fibrillation for example where cardiac output has been so compromised by that dysrhythmia that unless we bring them out of that dysrhythmic state we're still going to have a cardiac output that suffers.