ACLS Information

**Epinephrine**

Everything drug- used for everything that doesn’t have a pulse.

Dosage – 1mg every 3-5 minutes (Give every other time CPR is stopped.)

Works like “crack” gets heart excited, increases pulse and contractility.

Cannot OD on it; but can get “Epi Pulse”

**Adenosine (My hear is fast, slow it down) – Regular rhythm, Narrow QRS (Atrial Problem)**

Free Energy- ARP (Adenosine Tri Phosphate)

Dosage- 6 mg then 12 mg. Give rapid IV push, with fluids wide open.

Can put heart into Asystole for up to 10 seconds, resets the SA nodes.

Contraindicated in patient with Wolf Parkinsons White (WPW) Will speed heart rate up.

**Diltiazem (Cardizem) (My heart is fast, slow it down) – irregular rhythm, Adenosine didn’t work**

Calcium Channel Blocker- Becomes bouncer at cardiac cell; no calcium in or out.

Dosage 20mg (can give 10 and then another 10 for A fib w/RVR rate <150).

Can hang a drip if it works.

Watch calcium levels in blood, can cause hypotension.

**Atropine (My heart is slow, speed it up)**

Anticholinergic (dries the licker, speeds the ticker); blocks stimulation of the vagus nerve.

Dosage 1mg, max at 3mg.

Contradicted in anyone with heart transplant.

**Dopamine (drip) – speed up the heart**

Increases the squeeze- increases the contractility of the heart and heart rate

Dosage 5-20mcg/kg/min

Use when there is a pump problem.

**Epinephrine (drip) – speed up my heart**

Vasoconstrictor- increases the heart rate. Shunts blood to the core.

Dosage 2-10mcg/min.

Use when there is a volume problem.

Hypotension: 0.1-0.5mcg/kg/min.

**Lidocaine- Ventricular**

Xanax for the ventricles- “You won’t feel a thing”.

Used for oxygenation problems.

Dosage 1-1.5mg/kg; max 3mg/kg. All subsequent doses ½ of first dose.

1/mg/kg if alive, 1.5 mg/kg if dead. Can hang drip.

Too much can cause seizures.

**Amiodarone – Ventricular**

Works in the Purkinge Fibers with potassium, sodium, calcium exchange.

Used for electrolyte problems.

Dosage 150 mg over 10 minutes (must use inline filter) – Pt is alive. Can give 2nd dose of 150mg at 15 min.

300 mg IV push- pt is dead. Can give second dose of 150 mg. Can hang drip.

Too much over long can cause lung fibrosis.

**Procainamide – Ventricular**

Dosage 20-50mg/min.

**Synchronized Cardioversion**

Pads go front to back.

Turn on defibrillate, press sync button, arrow above QRS.

Atrial rhythm 80-120 Joules (SVT, A Flutter).

Ventricular rhythm 120-200 joules (a Fib w/ RVR, V Tach)

Can take up to 30 seconds to deliver shock.

Must press synch button every time you cardiovert.

**Pacing**

Pads go front to back, leads from the monitor must be on patient.

Turn on monitor to Pacer.

Dial up rate between 70-90 beats per minute.

Dial up milliamps till capture (mechanical is more important than electrical).

Electrical- pacer spike with wide QRS.

Mechanical- Pulse beat felt with every pacer spike.

Heart will adjust, must keep checking for capture.

**Defibrillation**

Pad placement on front R upper chest, L under breast.

All monitors are now biphasic monitors, defibrillate at 200 joules every time.