Rhythm disturbances

USING VASOPRESSORS IN CARDIAC ARREST

Vasopressor administration during cardiac arrest resuscitation may help to centralize blood flow to vital organs, and is associated with increased rates of return of spontaneous circulation (ROSC). However, there is very little evidence to demonstrate improved long-term outcomes from the use of vasopressors.

Epinephrine is a non-selective adrenergic agonist, and is generally administered as 1mg IV push during a cardiac arrest, repeated every 2–5 minutes. It increases inotropy, chronotropy, and vascular resistance (blood pressure). It has demonstrated increased rates of ROSC, but it has not shown improved neurologically intact long-term outcomes, and may compromise cerebral blood flow.

Vasopressin causes peripheral vasoconstriction through agonism of the V1 receptor, and may improve coronary perfusion pressure and preserve cerebral blood flow. However, it causes increased afterload for the left ventricle, which in some situations may decrease cardiac output. It is uniquely not pH-sensitive, in contrast to other vasopressors, like epinephrine.