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VASOACTIVE AGENTS - PRACTICAL ASPECTS

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Abstract: *Vasoactives are agents that are used to modulate hemodynamics in a patient. They can work by increasing the heart rate, contractility, dilating the blood vessels to improve tissue perfusion or constricting them to divert blood flow to important organs. Commonly used vasoactive agents are dopamine, dobutamine, epinephrine, nor-epinephrine, milrinone and vasopressin. Each of these agents have unique properties and knowledge about them is essential to titrate their doses in the critically ill child. While nor-epinephrine and vasopressin are dominant vasopressors, dobutamine and milrinone are dominant inodilators. Epinephrine and dopamine have varied actions based on the dose of infusion. Choosing appropriate vasoactive agent depends upon the hemodynamic status of the child. Inappropriate vasoactive selection may compromise tissue perfusion and result in more hemodynamic instability.*

Keywords: *Vasoactives, Inotropes, Vasopressor, Shock, Hemodynamics, Drugs.*

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Points to Remember

- ***All vasoactive drugs should be given as infusion due to their short half-life.***
- ***Accurate hemodynamic assessment is important in choosing the appropriate vasoactive agent.***
- ***Dopamine (>10mg/kg/min), norepinephrine, epinephrine (<0.2 μg/kg/min) and vasopressin are predominant vasopressors.***
- ***Dopamine (<10μg/kg/min), epinephrine (<0.2 μg/kg/min), dobutamine and milrinone are inotropes and vasodilators.***
- ***All vasoactive agents are arrhythmogenic.***

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