Guidelines for the Use of Albumin

Available: 5%, 25%

Recommended Neonatal Dose, Route, and Interval

1. For hypovolemic shock – Use 5% only: 0.5 -1 gm/kg (10 - 20 mL/kg/dose) of 5% albumin over 10-20 minutes (no faster than 2 - 4 mL/min. May give over shorter interval of time during arrest: 5 - 10 min).
2. For hypoproteinemia – Typically use 25%: 0.5 -1 gm/kg/dose over 2-4 hours (5%: 1 gm=20ml; 25%:1gm=4ml). When used for acute hypoproteinemia and edema, albumin should be infused over 1-2 hours and may be chased with furosemide.

Primary Indications

1. Hypovolemic shock (NS is first line therapy)
2. Hypoproteinemia

Possible Adverse Reactions

1. Vascular overload resulting in CHF and pulmonary edema.
2. Allergic reactions (fever, urticaria)
3. May cause rapid increase in serum sodium levels.

Contraindications & Precautions

1. Hypersensitivity to albumin
2. Severe anemia and cardiac failure
3. Low cardiac reserve or cardiac failure
4. Use with caution in patients with hepatic or renal failure
5. May cause circulatory overload with asphyxic infants; correct hypoxemia

Special Considerations and Calculations

1. Need to monitor serum protein/albumin levels
2. Observe for circulatory overload
3. Monitor input, output and vital signs
4. Pharmacy will prepare all albumin doses and will send doses up in a syringe. The infusion should finish within 6 hours.
5. Solution that shows sediment or appears turbid should not be used.

References:

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