Sequestration of protein rich fluids bilirubin.

In the uncommon situation of rapid loss of liver function, with or without coma, administration of albumin may serve per 100 mL in the patient.

With the relatively small priming volume required with modern pumps, preoperative dilution of the blood using albumin and crystalloid has been shown to be safe and well-tolerated. Although the limit to which the hematocrit

Acute Liver Failure

The approximate sodium content of the product is 145 mEq/L. Albuked 5 is clear, slightly viscous, almost colorless to pale yellow, amber or green. It contains no preservative. Albuked 5 must be administered intravenously.

Albuked 5 is iso-oncotic with normal plasma and on intravenous infusion will expand the circulating blood volume by an amount approximately equal to the volume infused. It is primarily used in the treatment of shock associated with hemorrhage, surgery, trauma, burns, bacteremia, renal failure, and cardiovascular collapse.(1)

Albuked 5 is a transport protein and it may be useful in severe jaundice in hemolytic disease of the newborn.(1) This could also be of importance in acute liver failure where albumin might serve the dual role of supporting plasma oncotic pressure, as well as binding excessive plasma bilirubin.(1)

INDICATIONS AND USAGE

Emergency Treatment of Hypovolemic Shock

Albuked 5 is iso-oncotic with normal plasma and on intravenous infusion will expand the circulating blood volume by an amount approximately equal to the volume infused. In conditions associated mainly with a volume deficit, albumin is best administered as a 5% solution (Albuked 5); but where there is an oncotic deficit, Albumin (Human) 25%, USP (Albuked 25) may be preferred. This is also an important consideration where the treatment of the shock state has been delayed. If Albuked 25 is used, appropriate additional crystalloid should be administered.(1)

Crystalloid solutions in volumes several times greater than that of Albuked 5 may be effective in treating shock in younger individuals who have no preexisting illness at the time of the incident. Older patients, especially those with preexisting debilitating conditions, or those in whom the shock is caused by a medical disorder, or where the state of shock has existed for some time before active therapy could be instituted, may not tolerate hypoalbuminemia as well.(1)

Removal of ascitic fluid from a patient with cirrhosis may cause changes in cardiovascular function and even result in hypovolemic shock. In such circumstances, the use of albumin infusion may be required to support the blood volume.(1)

Burn Therapy

An optimal therapeutic regimen with respect to the administration of colloids, crystalloids, and water following extensive burns has not been established. During the first 24 hours after sustaining the injury, large volumes of crystalloids are infused to restore the depleted extracellular fluid volume. Beyond 24 hours, albumin can be used to maintain plasma colloid osmotic pressure. Albuked 25 may be preferred for this purpose.(1)

Cardiopulmonary Bypass(1)

With the relatively small priming volume required with modern pumps, preoperative dilution of the blood using albumin and crystalloids has been shown to be safe and well-tolerated. Although the limit to which the hematocrit and plasma protein concentration can be safely lowered has not been defined, it is common practice to adjust the albumin and crystalloid pump prime to achieve a hematocrit of 20% and a plasma albumin concentration of 2.5 g per 100 mL in the patient.

Acute Liver Failure(1)

In the uncommon situation of rapid loss of liver function, with or without coma, administration of albumin may serve the double purpose of supporting the colloid osmotic pressure of the plasma as well as binding excess plasma bilirubin.

Sequestration of Protein Rich Fluids(2)

This occurs in such conditions as acute peritonitis, pancreatitis, mediastinitis, and extensive cellulitis. The magnitude of loss into the third space may require treatment of reduced volume or oncotic activity with an infusion of albumin.

Sites of Which Albumin Administration is Not Warranted(1)

In chronic nephrosis, infused albumin is promptly excreted by the kidneys with no relief of the chronic edema or effect on the underlying renal lesion. It is of occasional use in the rapid "priming" diuresis of nephrosis. Similarly, in hypoproteinemic states associated with chronic cirrhosis, malabsorption, protein losing enteropathies, pancreatic insufficiency, and undernutrition, the infusion of albumin as a source of protein nutrition is not justified.

CONTRAINDICATIONS

Certain patients, e.g., those with a history of congestive cardiac failure, renal insufficiency or stabilized chronic anemia, are at special risk of developing circulatory overload. A history of allergic reaction to albumin is a specific contraindication for usage.

WARNINGS

Albuked 5 is made from human plasma. Products made from human plasma may contain infectious agents, such as viruses, and, theoretically, the Creutzfeldt-Jakob Disease (CJD) agent that can cause disease. The theoretical risk for transmission of CJD is considered extremely remote. No cases of transmission of viral diseases or CJD have ever been identified for albumin. The risk that such products will transmit an infectious agent has been reduced by screening plasma donors for prior exposure to certain viruses, by testing for the presence of certain current virus infections, and by inactivating and/or removing certain viruses. Despite these measures, such products can still
potentially transmit disease. There is also the possibility that unknown infectious agents may be present in such products. Individuals who receive infusions of blood or plasma products may develop signs and/or symptoms of some viral infections, particularly hepatitis C. ALL infections thought by a physician possibly to have been transmitted by this product should be reported by the physician or other healthcare provider to Grifols Therapeutics Inc.

References