A colloid is a substance in which microscopically dispersed insoluble particles are suspended throughout another substance. Sometimes the dispersed substance alone is called the colloid; the term colloidal suspension refers unambiguously to the overall mixture (although a narrower sense of the word suspension is contradistinguished from colloids by larger particle size). Unlike a solution, whose solute and solvent constitute only one phase, a colloid has a dispersed phase (the suspended particles) and a continuous phase (the medium of suspension). To qualify as a colloid, the mixture must be one that does not settle or would take a very long time to settle appreciably.

Since a reduction in oncotic pressure without changing the osmolarity increases cerebral edema in animal models of brain injury [1)], colloid solutions have been known to prevent the severe reduction of colloidal oncotic pressure when used appropriately. However, the European Society of Intensive Care Medicine (ESICM) task force recommended against the use of colloids in patients with brain injury [2)], continuing the debate about the use of colloids in neurosurgery.

Hydroxyethyl starch

Hydroxyethyl starch

1)
Drummond JC, Patel PM, Cole DJ, Kelly PJ. The effect of the reduction of colloid oncotic pressure, with and without reduction of osmolality, on post-traumatic cerebral edema. Anesthesiology 1998; 88: 993-1002.
2)
Reinhart K, Perner A, Sprung CL, Jaeschke R, Schortgen F, Johan Groeneveld AB, et al. European Society of Intensive Care Medicine. Consensus statement of the ESICM task force on colloid volume therapy in critically ill patients. Intensive Care Med 2012; 38: 368-83.