Complications associated with the absorption of hysteroscopic fluid media.

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OBJECTIVES: To review the literature concerning complications resulting from absorption of hysteroscopic fluid distension media and to describe methods to treat and prevent these complications. DESIGN: All pertinent literature on fluid distension media used for endoscopy, as well as relevant reports concerning the management of fluid and electrolyte imbalance, was reviewed. RESULTS: The absorption of large volumes of electrolyte-free, low-viscosity fluid may result in volume overload with water intoxication. Volume overload may cause pulmonary edema, and water intoxication may lead to hyponatremia, hypo-osmolarity, and cerebral edema. In contrast, the absorption of dextran-70 may cause volume overload secondary to the oncotic effect of intravascular dextran. Dextran-70 has been associated with anaphylaxis and coagulation disorders. TREATMENT: The use of diuretics is advocated. Urine output must be closely monitored. Judicious correction of electrolyte imbalance will prevent morbidity. PREVENTION: Meticulous attention to intraoperative fluid balance is imperative. A multichannel hysteroscope is necessary to keep intracavity pressure low. Extensive surgical procedures may need to be performed in stages. CONCLUSIONS: Severe volume overload and electrolyte imbalance may result from fluid absorption during operative hysteroscopy. Most complications may be avoided by closely monitoring fluid balance intraoperatively.

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[Is co-administration of ethanol to the distension medium in surgical hysteroscopy a screening method to prevent fluid overload? A prospective randomized comparative study of ablative versus non-ablative hysteroscopy and various ethanol concentrations] [Gynakol Geburtshilfliche Rundsch. 1995] PMID:8672906