

Distension media delivery systems in hysteroscopy: past, present and future.

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ABSTRACT

To examine the uterine cavity and/or to perform hysteroscopic surgery, one has to access the uterine cavity through the cervix, distend the cavity with a fluid (liquid or gas) to visualize it with a telescope and/or a camera system and use energy (mechanical or thermal) to affect and/or remove tissue. Distension of the uterine cavity then is an important component of hysteroscopy, and during the last century, numerous attempts have been made to achieve an undistorted and unobstructed panoramic view of the uterine cavity. In order to achieve this goal, the uterine cavity has been distended with fluids using a variety of techniques, including gravity-assisted systems, pressure cuffed systems, and electronic pumps. Excessive fluid intravasation during hysteroscopy can lead to significant complications, and hence, automated fluid delivery systems have been developed recently to provide a safe and more efficient method of fluid delivery. This review aims to describe the evolution of distension media delivery systems chronologically from the 1900s to the present day.