

COMBINED VAGINOSCOPY-CYSTOSCOPY: AN IMPROVEMENT FOR VESICOVAGINAL FISTULA EVALUATION

Synopsis of Video

Vesicovaginal fistula leads to significant life disturbance for the patient and may give rise to medicolegal penalties for caring physicians. Furthermore, vesicovaginal fistula sometimes reveals itself somewhat challenging in terms of diagnosis and precise identification of the orifice, calling for several tests to be performed, such as intravaginal tampon, cystoscopy, retrograde pyelography, vaginal examination, voiding cystourethrography and intravenous pyelography, which may worsen the problems of both patient and physician.

Using a device that permits simultaneous view on the same display (picture in picture-PIP) of two images, we have performed combined vaginoscopy-cystoscopy (CVC) during evaluation of vesico-vaginal fistula as a means of better visualization, thereby, allowing more precise identification and better preoperative plan.

Technique. One regular cystoscope and a laparoscope (10 mm, 0 degree) were used, both attached to two different microcameras and light sources. The cameras were hooked to the back of the Twinvideo (Karl Storz®, Germany), allowing a wide variety of views combining both images. Cystoscopy was performed in a regular basis and the laparoscope was used for vaginoscopy using a transparent vaginal speculum, so, keeping the vagina open yet allowing visualization of the vaginal wall. Both images are combined in picture in picture and it allows an excellent sense of confidence during fistula identification process, as such view of urinary leakage, simultaneous view of passing a guide-wire through cystoscopy and it coming through the vaginal wall, showing the exactly fistula position.

During 2002, 04 cases were performed using the CVC technique. In one case, a vesicovaginal fistula was ruled out and severe stress incontinence was confirmed; this patient had a previous history of several surgeries for vesicovaginal fistula, yet she kept complaining of urinary leakage from the vagina. In another case, a suspicion of ureterovesicovaginal fistula was ruled out by using both CVC and CVU (Combined Vaginoscopy Ureteroscopy). In two further cases, the diagnosis of vesicovaginal fistula was confirmed with a precise identification of the orifice, as well as its course into the vagina, which allowed a good surgical plan in one case where a neoureterocistostomy needed to be performed.

CVC has become a routine procedure either in suspicious cases or in confirmed diagnosis for vesico-vaginal fistula at our institution as it increases the likelihood of fistula diagnosis and identification, thereby, allowing a better surgical plan.