Pelvic Fistulas.

Authors: J. Manavis, E. Kaldoudi, S. Touloupidis

Institution: School of Medicine Democritus University of Thrace, Greece

Contact: Author name: J. Manavis
Email: imanavis@med.duth.gr
Phone: (+30) 2551 076533

Purpose:
To illustrate the spectrum of imaging features of fistulas between the bladder and other organs of the pelvis.

Materials and Methods:
13 cases of fistulas were examined using intravenous urography, cystography, barium enema, US, CT and MR, depending on the case. The underlying disease was tumour in 5 cases, Crohn's disease in 3 cases, diverticulitis in 3 cases and radiation in 2 cases.

Results:
In the conventional radiography methods that involved contrast agents, the fistulous tract frequently failed to fill, mainly because many fistulas were small, tortuous and obliquely oriented. Ultrasound revealed the part of fistula in the urine bladder in all cases. CT proved superior in detecting the fistulous tract, and it also provided additional information regarding the etiology of the fistula and the extent of extraluminal disease. Rapid, heavily T2-weighted MR imaging also proved useful in the evaluation of occult fistulas.

Conclusion:
Although a history of passing urine, feces, foul smelling air or discharge through an unfamiliar orifice usually indicates the presence of an intrapelvic fistula, actual demonstration of the fistulous tract and identification of its underlying cause may prove rather difficult and usually requires more than one imaging method.
Vesicovaginal fistula. Cystogram shows leakage from the urinary bladder into the vagina

Small bowel series indicates irregular fistulous communication between the distal ileum and vaginal stump.

Sonography of the pelvis demonstrates the fistula between uterus and bladder.

Ultrasound scan showing the fistulous track between bladder and uterus.
serial CT sections after small bowel series reveal an irregular fistulous tract and the retention of leaked contrast medium in the bladder.

CT scan showing air in the bladder and a small abscess cavity in between the sigmoid colon and bladder. Fistulous communication between the two.

T2 FAT SAT W shows the fistulous between bladder and bowel in Crohn's disease.

T1+FS+CM. CA of the colon. Fistulous between bladder and bowel.