

Excrétion Urinaire de contraste digestif

E Danse , 2013

Visibilité de contraste dans les voies urinaires, lors d'un CT à blanc

- Soit erreur de manipulation (ici cas 1): purge de la voie veineuse avec du contraste dans la perfusion, au lieu du physiologique
- Soit excrétion du contraste digestif (préalablement ingéré ou injecté par voie basse)
 - Soit chez patient « normal »
 - Soit si entérite ou colite en activité
 - Soit si Insuffisance rénale

Vicarious urinary excretion of iodinated contrast in a Crohn's patient

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Radiology Case. 2010 Feb; 4(2):5-8 :: DOI: 10.3941/jrcr.v4i2.296

ABSTRACT

Vicarious renal excretion of iodinated contrast introduced into the bowel is a known phenomenon that has rarely been reported. In clinical settings like Crohn's disease in which evaluation for recto-vesical fistula is frequently requested, vicarious excretion can cause misapprehension and error in diagnosis. We present a case of Crohn's disease in which gastrografin enema was performed to evaluate for fistula and initial interpretation was mistakenly positive, however, simple methods of elucidation were utilized to prevent error in diagnosis.

CASE REPORT

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A 50-year-old female with a 17 years history of Crohn's disease, had underwent total colectomy and ileoanal anastomosis with Jejunum pouch reconstruction approximately 2.5 years prior to this examination. Since that time the patient had developed frequent bowel movements with up to 20 bowel movements a day. Multiple endoscopic evaluations were

was evacuated. Post evacuation over-head images, taken approximately after 25 minutes from initial rectal introduction of gastrografin, demonstrated contrast in the patient's bladder (Fig. 3). Initial concern was the presence of a recto-vesical fistula, however, contrast leak due to anastomosis break down was among the differential diagnosis; therefore, additional dynamic views were obtained which also demonstrated contrast in the bladder. The images were once more reviewed and after

Diagnostic error due to vicarious excretion of rectal iodinated contrast

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SUMMARY

Introduction of iodinated contrast into the intact colon is not expected to result in imaging-visible renal excretion of this contrast and is a phenomenon that has only rarely been described. We present a case in which such vicarious renal excretion was misinterpreted as a recto-vesical fistula which resulted in unnecessary delay in the patient's management.

Key words: *bladder; computed tomography; contrast media; gastrointestinal tract; intestinal perforation.*

CASE REPORT

A 68-year-old man underwent an ultra-low anterior resection with temporary diverting ileostomy for rectal carcinoma, which was complicated by postoperative intraperitoneal collections requiring drainage. Six months later, he presented for routine contrast enema prior to reversal of his diverting ileostomy, by which time he was asymptomatic.

Contrast enema with Gastrografin (Schering, Berlin, Germany) (sodium diatrizoate and meglumine diatrizoate) was carried out. Two hundred milli litres of Gastrografin containing 370 mg/mL iodine was diluted with 200 mL of water and introduced into the colon using a rectal catheter. This study showed the anastomotic site in the midline lower pelvis approximately 5 cm above the anal verge, with no leaks here. Contrast was seen to flow posteriorly from the rectum into a short (3 cm) out-pouching (Fig. 1). This was initially of concern for a posterior leak for which the patient was referred for CT. After the CT, it was interpreted to be a blind-ending colonic loop, an end-to-side anastomosis. Contrast then flowed easily away from the rectosigmoid segment to fill the

scan. However, contrast was seen within the bladder. This was diagnosed as evidence for a fistulous tract between the bladder and the rectum (Fig. 2).

This diagnosis of a recto-vesical fistula was a great surprise to the clinicians, as the surgery did not involve either the bladder or the ureters. Furthermore, the patient had no symptoms whatsoever of a fistula, such as pneumaturia or urinary tract infection. Review of the CT showed contrast within both ureters on the scans of the pelvis and in both kidneys on the scout view. The concept of vicarious renal excretion of absorbed colonic contrast was then considered.

In light of the interpretation of a possible fistula, the planned reversal of the patient's diverting ileostomy was delayed. He underwent repeat Gastrografin enema 1 month later (Fig. 3). This again showed an intact colorectal anastomosis. The patient was then transferred immediately for a CT abdomen within 10 min of completion of the enema study. Scans were obtained throughout the entire abdomen and pelvis without further rectal, oral or i.v. contrast. This showed all the introduced contrast as per the enema study to be remaining entirely within