

## The poppy-seed test is a cheap and accurate diagnostic tool for colovesical fistula

Patients with suspected colovesical fistula often undergo a series of expensive diagnostic tests and procedures, each of which have limitations. No consensus exists on the best approach to diagnosis. The poppy-seed test—which involves ingestion of poppy seeds and visual inspection of urine for the presence of the seeds during 48 h—is a simple diagnostic tool for colovesical fistula. Kwon and colleagues compared the accuracy and cost-effectiveness of this diagnostic tool with that of  $^{51}\text{Cr}$  nuclear study and CT.

The study included 20 patients (median age 74 years, 14 male) who were confirmed to have a colovesical fistula at surgery. Preoperatively, the patients were evaluated by CT of the abdomen and pelvis with oral and intravenous contrast medium, a  $^{51}\text{Cr}$  nuclear study and the poppy-seed test; results and costs of each test were recorded.

The most expensive technique was CT, at US\$652.92 per study. This modality also had the lowest detection rate (70%). The  $^{51}\text{Cr}$  nuclear study cost \$490.83 per study and had a detection rate of 80%. The poppy-seed test was both the least expensive (\$5.37 per study) and had the highest detection rate (100%).

In this small study, the poppy-seed test proved accurate, inexpensive and convenient. The authors suggest that it could be used as a cost-effective preliminary test for colovesical fistula, to identify patients who require further evaluation (e.g. detailed localization of the fistula by CT).

**Original article** Kwon EO *et al.* (2008) The poppy seed test for colovesical fistula: big bang, little bucks! *J Urol* **179**: 1425–1427

## Optimum management of emphysematous pyelonephritis: a systematic review

Patients with emphysematous pyelonephritis (EPN) are usually treated with antibiotic therapy, emergency nephrectomy and/or open surgical drainage; however, these conventional treatments have a high mortality rate (~40–50%). Although percutaneous drainage, a nephron-sparing procedure that preserves

renal function, is increasingly being used to treat these patients, the optimum management approach remains controversial. Somani and colleagues performed a systematic review of the current treatment strategies for EPN.

The analysis included 10 retrospective studies performed between 1966 and 2006, with data from a total of 210 patients with EPN (mean age 57 years, 79.5% female). Diabetes mellitus and urinary-tract obstruction was present in 96% and 29% of patients, respectively. Of the 208 treated patients, 24 (11.5%) received medical management only, 64 (30.8%) underwent emergency nephrectomy, 118 (56.7%) underwent percutaneous drainage, and 2 (0.9%) underwent open surgical drainage.

The mortality rate associated with percutaneous drainage (13.5%) was significantly lower than the mortality rates associated with medical management only (50.0%,  $P < 0.001$ ) and emergency nephrectomy (25.0%,  $P < 0.001$ ). Of 118 patients who underwent percutaneous drainage, 15 subsequently had an elective nephrectomy; only 1 (6.6%) of these patients died. In addition, renal function was normal or near normal in 32 (70%) of the 46 patients who underwent percutaneous drainage and for whom data were available.

The authors conclude that the management of patients with EPN should include aggressive antibiotic therapy and early percutaneous drainage; elective nephrectomy might also be required.

**Original article** Somani BK *et al.* (2008) Is percutaneous drainage the new gold standard in the management of emphysematous pyelonephritis? Evidence from a systematic review. *J Urol* **179**: 1844–1849

## DNA hypomethylation increases the risk of bladder cancer

Genomic instability has been noted in several cancers, including urothelial carcinoma of the bladder. Reduced methylation of DNA is thought to increase genomic instability, and thereby contribute to carcinogenesis. Moore and colleagues investigated whether DNA hypomethylation is associated with an increased risk of developing bladder cancer.

Participants included in this study were already enrolled in the Spanish Bladder Cancer Study, a hospital-based, case-control study.