Bowel preparation before xray KUB

Most of the calculi in the urinary tract are radio-opaque (1). Hence xray KUB (kidneys, ureters and bladder) is commonly done to diagnose urolithiasis in patients with abdominal pain in emergencies as well as in the clinic setting. Traditionally, it is done after giving laxatives and keeping the patient fasting overnight. This is to minimise bowel shadows due to gaseous and faecal matter, which could obscure the radio-opaque calculi. However, this causes unnecessary delay and inconvenience to patients, especially if they come from distant areas, and increases the hospital stay by another day or forces them to make another visit to the radiology department. A study was undertaken to determine the usefulness of this traditional bowel preparation.

Fifty (50) consecutive xrays KUB taken at the urology clinic and the surgical wards at Teaching Hospital, Karapitiya were collected. All patients had received the traditional bowel preparation of two tablets of bisacodyl the previous night, followed by overnight fasting. These xrays were mixed with another fifty (50) abdominal films randomly to avoid observer bias. All hundred were assessed by a radiologist (SW) in regard to the effectiveness of the bowel preparation in reducing bowel shadows due to gaseous and faecal matter.

Four xrays were excluded from the study because of poor quality due to technical errors. The bowel preparation was unsatisfactory in 32 (70%) of the 46 remaining xrays KUB as there were significant bowel shadows.

A comprehensive bowel preparation is recommended before an elective intravenous urogram (IVU), although there are differences in the exact preparation according to the radiology department (2). Traditionally, a bowel preparation is also done before an xray KUB, but there is no clear supporting scientific evidence (2). 70% of the xrays KUB taken after traditional bowel preparation in our study had bowel shadows to a significant extent for the radiologist to comment that preparation was unsatisfactory. This indicates that the traditional bowel preparation done widely in Sri Lanka does not meet the required aim, but only inconveniences patients and hospital staff. Although our study was done without a control group it challenges an old tradition. More comprehensive studies and awareness by the clinicians on this matter would help to draw up appropriate guidelines about the preparation before xrays KUB.

References


A M Abeygunasekara, Urological Surgeon, S Weerakoon, Radiologist, S De Silva and A Gurusinha, House Officers, Teaching Hospital, Karapitiya. (Accepted 11 August 2001. Corresponding author AMA: E-mail: amabev@sltnet.lk)