

CASE PROFILE: MULTIPLE RADIO PACITIES — RENAL
OR EXTRARENAL?

PROFILE

A previously well, nine-year-old, white female experienced an acute episode of severe right upper quadrant abdominal pain. Two weeks earlier, she had noted dark urine which cleared spontaneously.

Physical examination demonstrated abdominal fullness on the right side. Examination of her urine revealed 20 to 30 red blood cells per high-powered field, no white blood cells, and no bacteria.

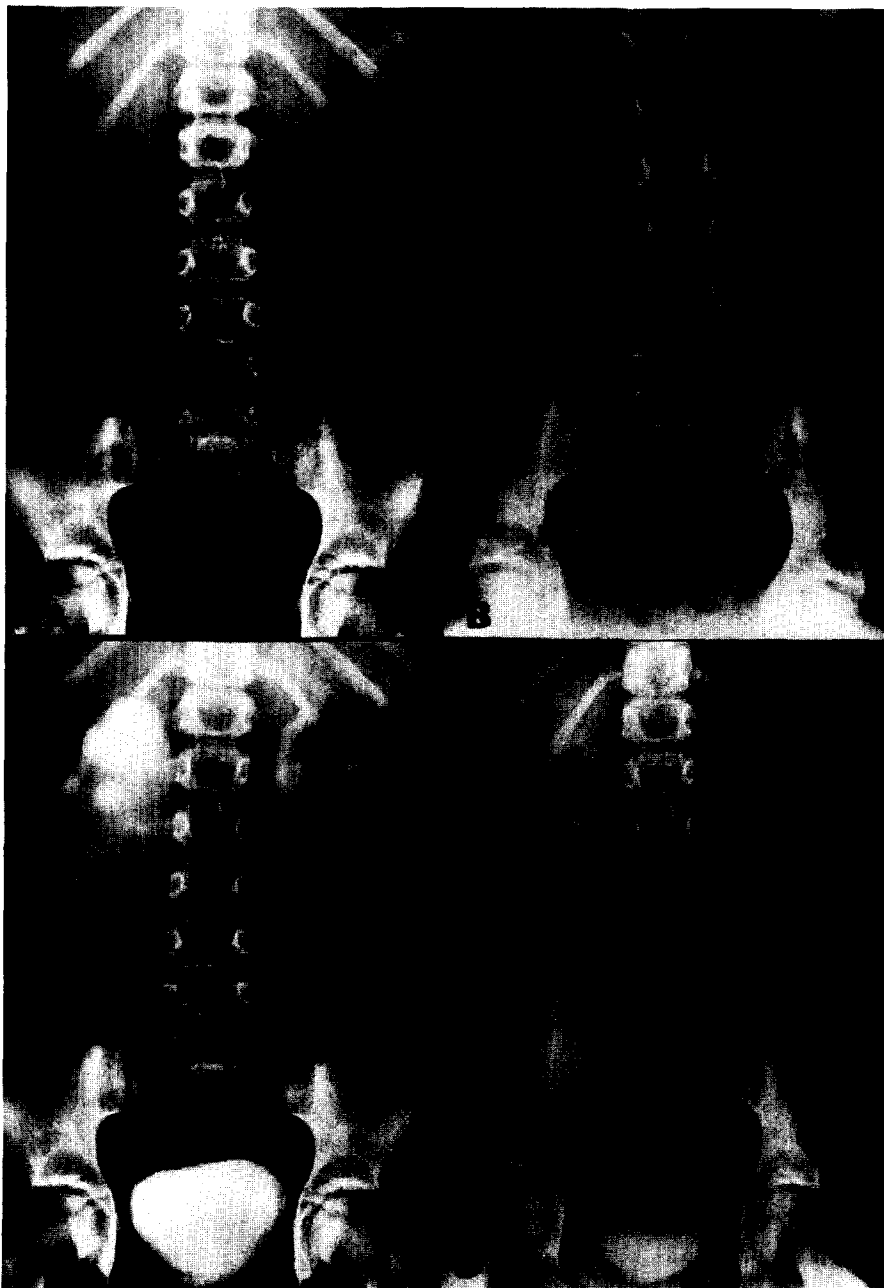


FIGURE 1. (A) Scout film of abdomen on admission with cluster of right upper quadrant stones. (B) With patient erect film of abdomen shows opacities descending into bony pelvis. (C) Excretory urogram showing large extrarenal pelvis with calculi of uncertain location. (D) With patient erect delayed excretory urogram shows opacities layering within renal pelvis.

Multiple radiopacities on the right side are seen on the scout film with patient in supine position (Fig. 1A), but are noted to descend into the bony pelvis with patient erect (Fig. 1B). Early films of the excretory urogram, likewise, suggest that the opacities are extrarenal, but on delayed films, with the patient erect, the opacities layer within a large (8 by 15 cm.) extrarenal pelvis (Fig. 1C and D).

Retrograde ureterography and diuretic radio-nuclide scanning confirmed a ureteropelvic junction obstruction. A dismembered-type reduction pyeloplasty was done, and twelve small calculi were removed from the collecting system.

These radiographs are instructive in illustrating the diagnostic confusion caused by calculi within an enlarged extrarenal pelvis. Comparison of films of supine and upright positions during excretory urography may be the only way to clarify the situation.

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NOTE — Urograms of interest to our readers are welcome from urologists and radiologists. Contributions, including an abbreviated history and legend for the films, are to be sent to Arthur N. Tessler, M.D., feature editor.
