

CASE PRESENTATION

Xanthogranulomatous Pyelonephritis

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ABSTRACT

We present the first case of xanthogranulomatous pyelonephritis reported in Bahrain, its presentation was unusual. A 13 years old Bahraini boy was admitted to our unit after he sustained a trauma to his right loin with fever, anaemia, weight-loss, and a high E.S.R. He underwent a full range of investigations, but the definite diagnosis could only be made at the operation.

Xanthogranulomatous pyelonephritis (XGP) is an uncommon chronic inflammatory condition involving the kidney, always unilateral, usually associated with renal calculi gross impairment of renal function, anaemia, leucocytosis, and a high E.S.R. The usual predisposing factor is a combination of obstruction and infection.

This entity was first described in 1961 and was called staphylococcosis¹ as it macroscopically looked like mycosis, and microscopically contained staphylococci. The term XGP was first introduced² in 1935, and due to diagnostic difficulties, relatively few cases were reported till 1973 when Francmalleville³ reviewed 150 cases.

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During the last decade reports of XGP have become more frequent, due to advances in imaging techniques. Over 400 cases are now described^{4,5,6,7,8}. And up to 1982 only single cases were described in children and all these were females. In 1982, 5 childhood cases, 3 boys and 2 girls were reported, and in 1985, 11 cases in children were reported⁹.

It affects males more than females, in some series 63% and 37% respectively⁸. All the cases were unilateral, simultaneous or subsequent bilateral involvement was never documented. The presenting symptoms and signs are usually nonspecific⁸.

We present the first case reported in Bahrain, the presentation of which was atypical and the diagnosis could only be made at the operating table.

THE CASE

A.Y. A 13-year old Bahraini boy admitted with fever, severe anaemia and weight loss of 5 days duration ! He gave a history of trauma to his right loin prior to the onset of his illness. His Hb was 7.9% and ESR was 95 mm/Hr. His urine culture was sterile.

After 2 days in the hospital on antibiotic treatment, he deteriorated, his Hb dropped to 5.4 g%, his ESR was 125 and he had a temperature of 39.8°C. He had no urinary symptoms but with a mild tenderness and a mass in his right loin.

I.V.U. was done (Fig. 1) and showed a large right lower pole renal mass compressing the kidney. These findings were confirmed by ultrasound.

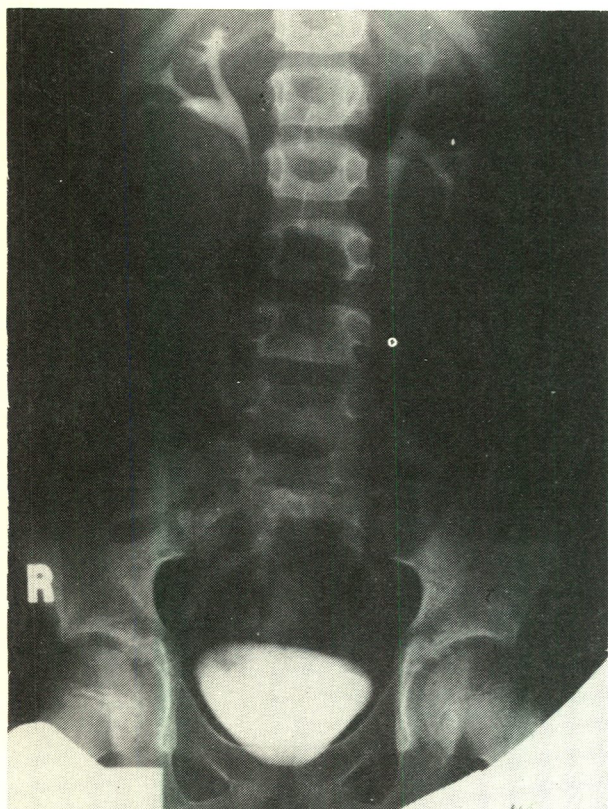


Fig. 1 : Shows a large mass in the lower pole of R kidney with compression of the kidney tissue.

Angiogram was done (Fig. 2), this was not conclusive therefore a C.T. Scan was performed (Fig. 3) and it strongly suggested infective lesion but malignancy could not be ruled out.

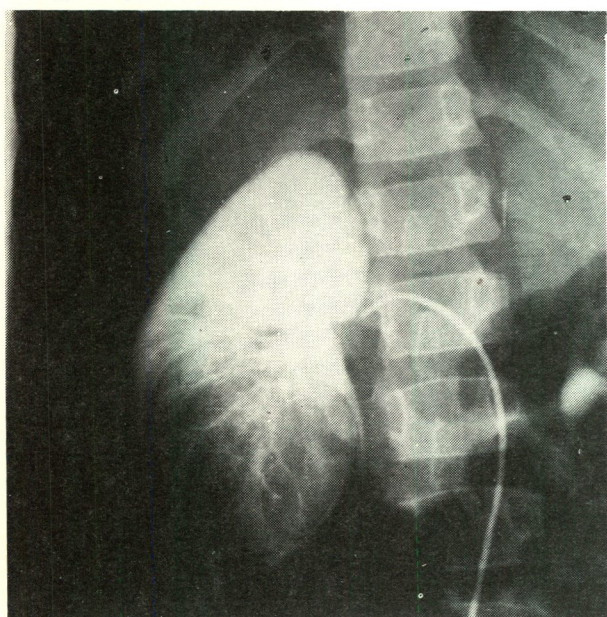


Fig. 2 : Shows mass on angiography



Fig. 3a : Showing a solid mass in the L kidney.



Fig. 3b : C.T. Scan picture showing parenchymal destruction.

After blood transfusion, the patient underwent an exploration of his right kidney. This was performed transperitoneally to reach the pedicle first, the kidney was densely adherent to the posterior abdominal wall and the colon; a radical nephrectomy was performed. Post operative period was uneventful, and the patient was discharged home 9 days post operatively and his Hb was 9.5 g% and ESR was 25 mm/Hr.

The histology showed xanthogranulomatous pyelonephritis (Fig. 4a, b) which clearly showed the foam cells and parenchymal destruction.