

A Retrospective Review of Xanthogranulomatous Pyelonephritis - Our Experience at a Tertiary Care Center Located in Dharwad District, Karnataka

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ABSTRACT

BACKGROUND

Xanthogranulomatous pyelonephritis (XGP) is an uncommon form of chronic pyelonephritis that is characterized by extensive enlargement and destruction of the involved kidney which ultimately results in non-functioning kidney. It often mimics other inflammatory or neoplastic renal disorders. Unlike chronic pyelonephritis, it spreads to the perinephric space with formation of multiple abscesses and fistulas. It is now being recognized as an important cause of renal morbidity and mortality worldwide.

METHODS

This is a case series undertaken in a tertiary care center. Clinical data was collected from last 6 years. Clinical features, radiological findings, treatment, and its outcome were analysed and presented.

RESULTS

A total of 23 cases diagnosed clinically were included in our study. The disease is more prevalent in females than in males with ratio of 1.8 : 1, with mean age of 47.04 years. Most of the patients presented with flank pain and fever. 2 patients had unusual presentations that are nephrocutaneous fistula and necrotising fasciitis of flank region. In our study, disease was associated with urolithiasis in 43.47 % and diabetes mellitus (DM) in 60.8 %. *E. coli* was the most commonly grown organism in urine culture. Most of the patients underwent initial percutaneous nephrostomy (PCN) or double-J (DJ) stenting followed by definitive treatment that is nephrectomy (21 patients, 2 patients lost to follow up). Extraperitoneal flank approach was most commonly chosen compared to subcostal transperitoneal approach. Excess blood loss was the most common complication encountered during surgery; 8 patients required post-operative blood transfusion. 5 patients required intensive care unit (ICU) care with inotropic support post-operatively. 6 patients had post-operative superficial surgical site infection.

CONCLUSIONS

XGP is a rare form of chronic pyelonephritis resulting in enlarged non-functioning kidney. UTI (urinary tract infection) and urolithiasis are the most important factors involved in pathogenesis. Prompt diagnosis and treatment is essential. Initial antibiotic treatment with drainage procedure (PCN or DJ stenting) followed by nephrectomy is treatment of choice. Early diagnosis and treatment may limit the disease process and associated morbidity, thus leading to good outcome.

KEYWORDS

Xanthogranulomatous Pyelonephritis, UTI (Urinary Tract Infection), Urolithiasis, Nephrectomy

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