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New study finds Ceftriaxone Linked to Renal Failure in Children

Ceftriaxone, an antibiotic commonly used to treat childhood infections. Already, some of the known adverse effects that can arise from treatment using ceftriaxone are biliary pseudolithiasis, nephrolithiasis, and bladder sludge.¹

This study finds that ceftriaxone used at therapeutic doses is linked to renal stones and pediatric acute renal failure (PARF), with recovery possible on early treatment.²

The study was conducted in China in which 31 cases of PARF were found after treatment with ceftriaxone with average time of ceftriaxone administration before PARF was 5.2 days between January 1, 2003 and June 30, 2012.²

Children in the study responded differently to pharmacotherapy to help treat their PARF. 9 patients responded to initial treatment after 1 to 4 days of treatment, with another 20 requiring catheterization in order to resume urine flow. In addition, some patients required hemodialysis to restore urination.²

On the basis of this study, the authors advise that observation of sudden-onset anuria or flank pain in children receiving ceftriaxone should prompt its immediate discontinuation, further evaluation with blood tests and ultrasound, and early treatment on confirmation of the diagnosis.¹

In conclusion, Ceftriaxone therapy in children may cause PARF. Early diagnosis and prompt pharmacological therapy are important in relieving the condition and further studies of interventions will be necessary to learn how to avoid ceftriaxone stone formation.

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References:

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