High-dose methotrexate therapy for a child with B-cell precursor acute lymphoblastic leukemia and congenital solitary kidney

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Abstract

High-dose methotrexate (HD-MTX) is a key drug in the treatment of various cancers. Massive fluid infusion is necessary during HD-MTX therapy to ensure proper methotrexate excretion. There are no reports on the safety of HD-MTX therapy in patients with congenital solitary kidney (CSK). A 5-year-old male child with CSK and B-cell precursor acute lymphoblastic leukemia was treated with four cycles of HD-MTX therapy. HD-MTX therapy was safely administered without delayed MTX excretion or renal dysfunction. This case showed that HD-MTX therapy was well tolerated by a pediatric patient with CSK.

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