



Outpatient parenteral antimicrobial therapy (OPAT) offers the option of treating children requiring intravenous antibiotics for acute urinary tract infection(UTI)/pyelonephritis at home” Scanlan et al (2018).

Abstract:

BACKGROUND: Outpatient parenteral antimicrobial therapy (OPAT) offers the option of treating children requiring intravenous antibiotics for acute urinary tract infection(UTI)/pyelonephritis at home. We aimed to determine the outcomes of treating patients with UTI/pyelonephritis using OPAT directly from the Emergency Department (ED) without admission to hospital.

METHODS: This was a retrospective study (Aug 2012-Jul 2016) of children with UTI/pyelonephritis treated with parenteral antibiotics via a peripheral cannula directly from ED to home under a hospital-in-the home (HITH) program. Data collection included demographics, clinical features, length of stay, complications and readmissions to hospital.

RESULTS: There were 62 patient episodes of UTI/pyelonephritis transferred directly from ED to HITH. 58 (94%) had systemic features including fever, vomiting, and/or tachycardia. 18 (29%) patients had an underlying condition. 9 (15%) received intravenous fluids and 8 (13%) antiemetics in ED. The OPAT course was successfully completed in 56 (90%) patients. Of 6 (10%) patients who were readmitted, 2 were discharged within 24 hours and none were

severely unwell. 2 (3%) had a blocked cannula, with no antibiotic complications. HITH patients were treated for a combined total of 142 days at home resulting in a cost saving of AUD108,914 (USD82,775). However, only 8% of children deemed to require a course of IV antibiotics were transferred directly home from ED. Compared to patients concurrently admitted to hospital, fewer on HITH less than 1 year of age (13% versus 33%, OR 0.3, $p < 0.01$).

CONCLUSIONS: Selected patients presenting to ED with UTI/pyelonephritis may be treated directly via HITH, including some with underlying conditions and/or systemic features.

Reference:

Scanlan, B.T., Ibrahim, L.F., Hopper, S.M., Babl, F.E., Davidson, A. and Bryant, P.A. (2018) Selected Children with Complicated Acute Urinary Tract Infection May be Treated with Outpatient Parenteral Antibiotic Therapy at Home Directly from the Emergency Department. *The Pediatric Infectious Disease Journal*. April 9th. .

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