

NHSEED - - Economic Study or Review

Intravenous or oral antibiotic treatment in adults and children with cystic fibrosis and *Pseudomonas aeruginosa* infection: the TORPEDO-CF RCT.

Code: PM34806975

Year: 2021 Date: 2013

Author: Langton Hewer SC

Study design (if review, criteria of inclusion for studies)

retrospective cohort study

Participants

40 CF patients

Interventions

Managed therapeutic drug monitoring (TDM) by clinical pharmacist (CP) compared with usual care (UC).

Outcome measures

Clinical pharmacist impact on care, length of stay, and cost in pediatric cystic fibrosis (CF) patients. Number of pediatric CF patients achieving Aminoglycoside (AG) pharmacokinetic and pharmacodynamic (PK/PD) targets when a clinical pharmacist (CP) managed therapeutic drug monitoring (TDM) compared with usual care (UC).

Main results

Twenty-nine patients with 52 courses of AGs were included the CP group, and 22 patients with 42 courses were included the UC group. Ninety-eight percent of patients in the CP group reached AG PK/PD targets compared with 71% in the UC group, $P=0.0001$.

Authors' conclusions

CP managed TDM resulted in a significantly higher percentage of pediatric CF patients achieving AG PK/PD targets 3 days sooner with an average LOS that was 3 days shorter. CP managed TDM resulted in significantly fewer dosage adjustments, drug levels, and cost associated with serum sampling, drug wastage, and LOS.

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See also

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Keywords

Anti-Bacterial Agents; non pharmacological intervention - psycho-soc-edu-org; Bacterial Infections; Respiratory Tract Infections; Respiratory Tract Diseases; Infection; Organization; Aminoglycosides;