Background and importance

Outpatient parenteral antimicrobial therapy (OPAT) has significantly increased since the implementation in 2015 of a hospital at home (HaH) unit. This increase was largely due to the versatility of once daily OPAT administration, advances in vascular access and infusion devices, and high acceptance by patients and healthcare professionals. The implementation also decreased cost, and improved safety and efficacy in a large number of infectious diseases. In 2018, an OPAT working group at a HaH unit was formed to optimise intravenous antimicrobial (IA) therapy, developing therapeutic protocols, and improving OPAT administration procedures at the patient’s home.

Aim and objectives

To assess the importance of integrating a pharmacist into the HaH OPAT working group to optimise parenteral antimicrobial therapy.

Material and methods

A bibliographic review and analysis of summary of products characteristics of IA therapy in the hospital was carried out to evaluate the properties, dosage, administration routes and stability after reconstitution and/or dilution. Assessment of patient profiles treated with OPAT at the HaH during the first semester of 2017 was done and identification of the main differences compared with patients admitted to the conventional medicine service who refused to be admitted to the HaH during the same period.

Results

The literature review allowed the development of a summary table with the most relevant information: reconstitution, dilution, stability, administration routes, incompatibilities, interactions and alerts. In April 2018, HaH therapeutic protocols were implemented according to IA selection and administration routes, as well as the use of programmable infusion devices that allow continuous or intermittent infusion according to the stability of each IA.

An assessment was made 6 months after the implementation of these measures, demonstrating that the use of third generation cephalosporins were successfully substituted with second generation cephalosporins in 30% of patients.

Conclusion and relevance

The literature review contributed towards optimising the selection and use of IA, promoting its rational use, a fact proven by the decrease in third generation cephalosporin use. Study of the routes of administration and stability after reconstitution and/or dilution allowed minimisation of adverse effects. Therefore, the integration of a pharmacist into the HaH OPAT working group contributed towards increasing the effectiveness of OPAT and patient safety.

REFERENCES AND/OR ACKNOWLEDGEMENTS


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