hospital's electronic prescribing system and make prescribing of future levels a standard practice to remind all medical staff that regular trough levels are required.

REFERENCE

1 Joint Formulary Committee. British National Formulary for children 2013–14. London: BMJ Group and Pharmaceutical Press 2013.

P 46 A REVIEW OF THE TRUST'S PAEDIATRIC VANCOMYCIN GUIDELINES

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Aims & Objectives Vancomycin is a broad spectrum glycopeptide antibiotic used for the treatment of gram positive bacterial infections. The use of vancomycin is limited by its potential for nephrotoxicity and ototoxicity at high and sustained plasma levels; it is administered by intermittent infusion to avoid this. Trough levels are taken 30 minutes before a dose to determine plasma concentrations, these levels should be low enough to allow the patient's own cells to recover while still remaining above the mean inhibitory concentration to exhibit bactericidal activity and minimise the development of resistance. In 2006, the recommended trough levels were increased from 5–10 mg/l to 10–15 mg/l however the recommended dose remained the same.[1] This has necessitated doses to be given in excess of the BNFc and licensed doses; this audit looks at the current paediatric guidelines and practice to determine whether these trough levels are being achieved. Specifically it looks into the initial prescribing of vancomycin doses, the administration timing of doses, the trough plasma levels taken and adjustments that were made to doses during therapy.

Method A retrospective analysis of patient notes was undertaken using data from paediatric patients <18 years old identified by the paediatric intensive care unit pharmacist as having received vancomycin between Nov 2011 and Jan 2014. A random sample of 67 courses of treatment was taken. Patients were sorted into four groups corresponding to their renal function. Pre-term neonates and patients treated using the adult guidelines were excluded from the study.

Results 70% of patients were prescribed the correct starting dose (±10%) for their renal function. 57% of patients had their dose adjusted in accordance to the guidelines. 76.2% of doses were administered on time (±1 hour), 80% of doses not given on time were given as late doses. 33% of levels taken fell within the therapeutic range of 10–15 mg/l. A subset analysis of the starting regimen for patients in renal function group B suggested little difference in outcomes when the guidelines were adhered to vs. non adherence.

Conclusions An overall low adherence to the guidelines suggests that a greater awareness and dissemination of the guidelines is required. The guidelines may require minor rewording to reduce ambiguity. It could prove beneficial to utilise the