A Chi-square test was applied to study whether the evolution of renal function depended on acceptance (p value 0.634).

**Conclusions** Electronic prescribing is a useful tool for identifying opportunities for PI in patients with RI. Differences in renal function progression between the group in which the PI were accepted and the group in which these were rejected were not statistically significant.

No conflict of interest.

**Materials and Methods** A quasi-experimental/retrospective study was carried out, analysing discrepancies between chronic medicines and drugs prescribed in the hospital, before and after a medicines reconciliation programme was implemented.

Patients admitted into a general surgery unit for more than 24 h who were taking ≥3 drugs chronically at home were included.

A standardised interview was conducted to record chronic medicines. Pharmacists detected and investigated discrepancies. The severity of unintended discrepancies was assessed by consensus with medical staff using the National Coordinating Council for Medication Error Reporting and Prevention 2001 classification. A computerised reconciliation tool, integrated into the electronic prescription, was implemented during the intervention phase.

**Results** A total of 191 patients were included (52.9% male, 47.1% female), 107 patients in the phase before intervention and 84 in the phase after intervention.

1,951 drugs were investigated, and 1,678 discrepancies were detected. There were 167 unintended discrepancies, 102 (10.6% of drugs investigated) in the first phase and 65 in the second phase (6.6%), p = 0.0021. Omission of drugs was the most common unintended discrepancy, being 89 (9.2%) in the phase before and 55 (5.6%) in the phase after intervention, p = 0.0027.

Unintended discrepancies were grade C severity in 79.2% of those detected, decreasing in the second phase (3.95% of total drugs investigated) compared to the first one (8.61%), p < 0.05.

**Conclusions** The implementation of the medicines reconciliation programme has shown a reduction of the rate of unintended discrepancies detected during admission into a general surgery unit. Omission of drugs was the most common type of discrepancy detected in both phases and decreased after intervention.

No conflict of interest.
Purpose To report the introduction of a gravimetric process of weighing to encourage its future implementation and increase the quality and safety in the preparation of parenteral nutrition (PN).

Materials and Methods In order to standardise the gravimetric control of PN, a protocol was developed by the nutrition unit. The quality of the PN preparation was established by calculating the accuracy (the mean of the error in the gravimetric analyses (EGA)) and precision (square root of the mean square of the EGA) and the alert limits were set at ±5%.

The first step was to determine the densities of the components of the PN and update the parenteral nutrition programme. The PN labels were modified to show the theoretical weight of the PN and the maximum and minimum limits allowed.

Results One strategy established for the quality control of the final product was to compare the final weight of the product with the volume and the density calculated for each component.

In the first 67 days 150 parenteral nutrition mixtures were made in the neonatology department. The average theoretical weight was 323.68 g (±236.04) and the average measured weight was 323.45 g (±259.94).

The mean difference of the actual weight versus the theoretical was 2.8% (±0.04).

Conclusions Gravimetric analysis is a strategy to check the accuracy and precision in PN and complements the quality assurance processes normally used to regulate the preparation.

No conflict of interest.

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**GRP-092 IMPLEMENTATION OF RECOMMENDATIONS ARISING FROM THERAPEUTIC MONITORING OF VANCOMYCIN TROUGH LEVELS IN A TERTIARY HOSPITAL**


Background In 2009 we established a consensus review of therapeutic monitoring of vancomycin by several societies including the American Society of Health-System Pharmacists (ASHP), the Infectious Diseases Society of America (IDSA) and the Society of Infectious Diseases Pharmacists (SIDP).

Purpose To study the use of plasma concentrations (PCs) as a tool for monitoring the effectiveness and safety of vancomycin treatment; follow-up of the changes made in response to the recommendations.

Materials and Methods Retrospective descriptive study in a tertiary hospital during the first four months of 2012. Vancomycin trough plasma concentrations (PCs) were collected. The laboratory service requested and identified patients treated with vancomycin in the inpatient dose dispensing system. An automatic system recorded the doses, days of treatment indicated, glomerular filtration rate (GF) prior to and during treatment with vancomycin (calculated by the MDRD formula, considering renal function impairment (RFI) lower GFR 80 ml/min) and concomitant treatment. The recommendations contained in the consensus document on vancomycin therapeutic monitoring of the Infectious Diseases Society of America (IDSA) and the American Society of Health-System Pharmacists (ASHP) were used as the standard criteria for vancomycin PC monitoring: RFI, treatment for more than five days or concomitant nephrotoxic drug administered.

Results 80 patients were enrolled, median age 66, 21 men, median treatment duration of 7 (1–46) days. The PC was checked in 10% (3) of the patients, two had PCs within the recommended values. In the third patient a single plasma level was requested, which revealed less than the recommended values but the same dose and schedule was maintained throughout the 29 days of treatment. In none was the area under the curve divided by the minimum inhibitory concentration (AUC/MIC) reported, the pharmacokinetic parameter best related to the effectiveness of vancomycin. Plasma levels were not requested in 27 patients, 90% of the total treated with vancomycin. 65% met one or more criteria for monitoring; treatment for longer than five days was the most common criterion (20). In one patient the recommendations made were acted on.

Conclusions The established recommendations on therapeutic monitoring of vancomycin are not being applied in our hospital.

A high number of patients treated with vancomycin did not use the PC as a parameter with which to monitor the efficacy and safety of antibiotic treatment.

One possible cause could be a lack of training of medical staff on the usefulness and benefits of vancomycin monitoring, particularly during prolonged treatment and in patients with RFI.

No conflict of interest.

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**GRP-093 IMPLEMENTING AND IMPROVING MEDICINES RECONCILIATION ON ADMISSION AT NORTH BRISTOL NHS TRUST (NBT)**

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Background Medicines Reconciliation ensures that medicines prescribed on patient admission correspond to those taken before