



STUDY OF THE IMPLEMENTATION OF A VANCOMYCIN PHARMACOKINETIC MONITORING PROGRAMME IN PAEDIATRICS

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BACKGROUND AND IMPORTANCE

-Efficacy and toxicity are strictly related with Vancomycin serum concentrations.

-Special care must be considered when treating **paediatric** patients with this antibiotic.

AIM AND OBJECTIVES

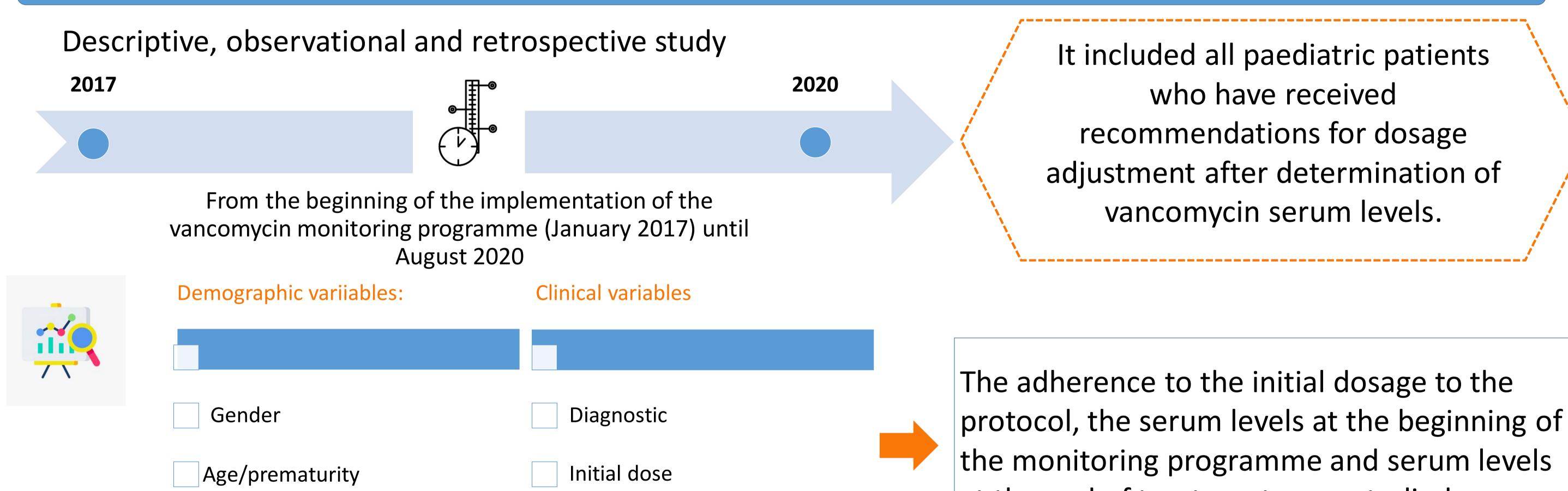
1 - Analysis of the compliance to the Vancomycin dosage protocol in paediatrics of a third level



hospital.

2.-Evaluation of the impact of pharmacokinetic monitoring on the adequacy of therapeutic levels.

MATERIAL AND METHODS



Prescribing services

Initial and postrecommendation vancomycin serum levels

at the end of treatment were studied.

RESULTS

n=133 83 men (62,4%) Mean age for patients less tan 1 month old: 14,5±9,4 days Mean age for patients older tan 1 month: 4,4±4,2 years [1 month-14 years]

68.1% of the neonatal patient population were premature at less than 40 weeks gestation.

Prescribing services:

Neonatal ICU (40.6%), Paediatric ICU (27.8%), Neonates (14.3%), Paediatrics Infectious Diseases (8.3%), Paediatrics (5.3%), and Paediatric Oncology (3.8%).

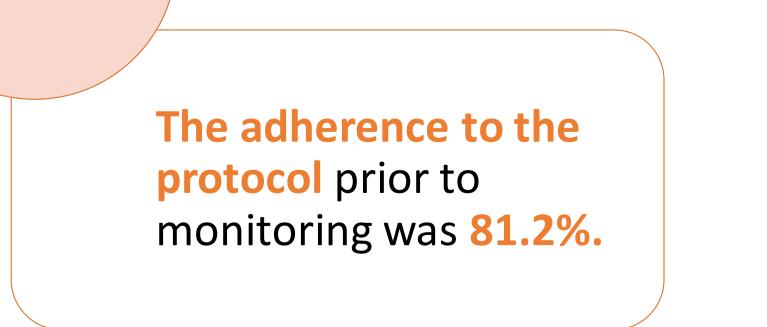
Following pharmacokinetic recommendations, the values were within the range in 66.2% of cases.

Vancomycin levels were within the therapeutic range in **30.8%** of cases at the start of monitoring



Diagnostics:

Suspected infection (37.2%), sepsis (25.6%), meningitis (10.9%), bacteraemia (7.8%), pneumonia (4.7%), gastrointestinal infection (3.9%), urinary tract infection (1.6%), and other causes (8.5%).



CONCLUSIONS AND RELEVANCE

The variability in the paediatric patients of this study shows that, even though most prescriptions are in accordance with the protocol, only 30.8% achieve therapeutic levels. This percentage doubled after the monitoring programme, which highlights the great value of monitoring and personalised dose recommendations, especially recommended in this type of patient.