

# ASSESMENT OF THE EFFECTIVENESS OF USING VANCOMYCIN IN PATIENTS UNDERGOING HAEMODYALISIS



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## **PURPOSE**

- •To assess the effectiveness of treating with vancomycin in patients undergoing hemodialysis.
- •To assess the effectiveness of monitoring by the Pharmacy Service.

# MATERIAL AND METHODS

- •Study design: prospective and analytical between October 2013-March2017.
- •<u>Patients included:</u> patients in hemodialysis with vancomycin and monitored by the Pharmacy Service.
- •<u>Variables</u>: age, sex, weight, diagnosis, residual renal function (RRF), type of infection, microorganisms isolated, dialysis membrane, target level, loading dose, recommended dose, range of valleys, effectiveness of treatment (clinical and microbiological) and toxicity.
- •The target serum concentration was between 15-20  $\mu g/ml$  in severe infections and 10-15  $\mu g/ml$  in milder cases

#### RESULTS

TREATMENTS	65
PATIENTS	58
SEX (MEN)	31
AGE	63.5 years (27-91)
WEIGHT	73.1kg (35-110)
RRF	46 %
DIALYSIS MEMBRANE	50,7% high flow – 47.7% low flux
TYPE OF TREATMENT	69,2 % specific
TYPE OF INFECTION	58.5 % bacteriemias related to catheters
TARGET LEVEL	15-20 μg/ml 83%
LOADING DOSE	18.89 mg/kg (10-28.57)
RECOMMENDED DOSE	0-2g
TARGET LEVEL REACHED	78.5%
CLINICAL EFFECTIVENESS	<b>75</b> %
MICROBIOLOGICAL EFFECTIVENESS	51%
ADVERSE EFFECTS	

## CONCLUSIONS

- The infection was solved in 75% of cases,
- •The target concentration was reached in 78.5% of cases, highlighting the need of monitoring.
- •This and further studies are needed to develop an specific clinical guideline