

## **Vancomycin Protocol**

### Introduction

Sepsis is an important cause of morbidity and mortality in haemodialysis patients. Vancomycin is commonly prescribed to treat sepsis in these patients. No specific protocols have been set to inform the duration and frequency of vancomycin in haemodialysis patients. Confusion often arises regarding dosing frequency, strength and therapeutic levels. To address this problem, we have introduced a protocol for prescribing vancomycin in haemodialysis patients.

### Protocol

1. Are there features of catheter-related infection/unexplained sepsis?
2. If there is, consider treatment with vancomycin after blood cultures have been taken
3. Ensure drug allergy box is filled.
4. Determine the patient's total body weight
  - a. If patient's body weight is < 60kg, treat with 500mg
  - b. If patient's body weight is > 60kg, treat with 1g
5. Give Vancomycin as per body weight in the last hour of the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> haemodialysis sessions. Aim for levels of 15-20mg/L
6. Check Vancomycin trough levels prior to 4th haemodialysis session
  - a. If levels are <15mg/L, give a further dose of vancomycin at increments of 500mg (as per body weight). For example, if pt's weight is <60kg give 1g, if pt's weight is > 60kg give 1.5g. Repeat trough level after 3 doses.
  - b. If levels are between 15 and 20 , dose vancomycin as per body weight. Repeat trough level after 3 doses
  - c. If levels are > 20 mg/L, no vancomycin is required. Vancomycin levels are to be rechecked prior to next haemodialysis session
7. If coagulase negative staphylococci bacteraemia is present, 2 weeks of vancomycin is required
8. If there is evidence of MRSA/MSSA bacteraemia, treat with vancomycin for 2 weeks and consider catheter removal if there are no signs of clinical improvement.
9. Ensure that vancomycin is prescribed on the front of the drug chart and is diluted in 250ml 0.9% Saline , given over 90 minutes on dialysis.