Patients with chronic kidney disease (CKD) are fragile. Hemodialysis, the most useful renal replacement therapy (RRT) in the world, is the only treatment available in Madagascar. It is an invasive act that may expose various complications. This present study aims to assess the prevalence of the bacterial complication in patients who lived with chronic hemodialysis. We have conducted a retrospective, exhaustive and descriptive single center study. Record based study was carried in Befelatanana Hemodialysis Center, University Hospital of Antananarivo, Madagascar. All patients underwent a chronic hemodialysis who presented an infection sign from 10th May 2006 to 31st July 2010 were included. The Center received 84 patients with end stage of CKD who started chronic hemodialysis. Over 136 infections have been suspected but only 33.8% (n=45) benefited a bacterial identification. In 42.65% of cases, infection began in 20 days after the first hemodialysis session. Vascular access using catheter is the principal source of infection in 49.06%, followed by pulmonary (21.3%), urinary (12.5%), and digestive (7.4%) infection. Staphylococcus aureus (34.3%), Escherichia coli (9.4%), Enterococcus spp. (9.4%) were the bacteria frequently encountered. Sepsis appeared in 98.52% of cases and many patients presented with septic shock. All patients received an adjusted antibiotic therapy according to susceptibility testing. The survival rate was in 100%. Treatment of CKD is very expensive in Madagascar and less than 3% who need chronic hemodialysis have the opportunity to do it. That explains our few studied population. In our cohort, access vascular related to catheter represents the common source of infection (49.06%). This prevalence is higher than another American studies. Almost, all patients arrive lately at the hospital with an end-stage of CKD imposing starting hemodialysis in emergency with catheter. Another source of infection has been seen in other sites. Patients can also reduce infection independently of hemodialysis. Antibiotic therapy allowed a favorable evolution in almost all of the cases. To conclude, using access vascular with catheter is inescapable in our center, inducing bacterial complication, high morbidity in chronic hemodialysis. To fix that, promoting native fistula with early nephrology medical follow could be a solution. Renal transplantation with living donor, the best and less expensive RRT than chronic hemodialysis is now in progress, in collaboration with Madagascar Government.

**Biography**

Eliane Mikkelsen Ranivoharisoa has received her Bachelor’s degree in 2002. She has studied Human Medicine from the University of Madagascar and has received Doctorate degree in 2012 and then she studied Internal Medicine with Nephrology Orientation from the University of Madagascar. She started her Nephrology training from Bordeaux- France in 2013 and has got her Diploma of Specialized Medical training in Nephrology in 2014 in France. She has also studied Systemic Diseases and Kidney from the University of Strasbourg, France. She has published some Nephrology papers in national and international journals. She is Member of SMN Madagascar, SFNDT and ISN education.

remikmed@hotmail.Fr

**Notes:**