

14TH WORLD NEPHROLOGY CONFERENCE

July 23-24, 2018 Melbourne, Australia

Is phosphate level associated with increase risk of infections in CKD patients on hemodialysis – A study from tribal area of Chhattisgarh

Punit Gupta¹, Nikita J², Gurvinder C² and Ayushi M²

¹PT.J.N.M. Medical College, India

²Dr. B.R.A.M. Hospital, India

Objectives: Hyperphosphatemia is highly prevalent in dialysis patients and may be associated with immune dysfunction. The association of serum phosphate level with infection remains largely unexamined.

Material and method: A study group contain total of 100 patients, out of which 25 patients blood culture and central venous catheter tip culture was positive. All Patients were underwent investigation in form of renal function test, C Reactive Protein level, serum phosphorus, blood culture, urine culture, central line tip culture.

Results: Out of 25 patients of renal failure on hemodialysis with sepsis none had serum phosphate level less than 3.5 mg /dl, 4 (26.67%) had serum phosphorus level between 3.5 – 5.5 mg/dl and 11 (73.33%) patients had serum phosphorus level > 5.5 mg/dl. Infections of any type were more frequent among patients with high phosphate levels at baseline, relative to normal. Male sex, advanced age, diabetes, anemia, hypoalbuminemia were found to be risk factors for infections. Gram positive cocci (*Staphylococcus aureus*) was the most common organism found in blood of 80% patients of renal failure on haemodialysis with sepsis. Incidence of sepsis was high with femoral vein (66.67%) usage and prolonged hemodialysis (more than 21 days). Serum Phosphorus level was high in 73.33% patients and CRP was raised in all 25 patients with sepsis. Most of the patients were euthyroid and their lipid profile was normal.

Conclusions: High phosphate levels may be associated with increased risk for infection, contributing further to the rationale for aggressive management of hyperphosphatemia in dialysis patients.

Biography

Punit Gupta is MBBS, MD (Medicine), DM (Nephrology) and PhD. He is the Honorary Nephrologists to the Governor of Chhattisgarh State since 2009. He is Chairman and Members of many important academic and management committees of various Government Medical Institutions in the country and the Pt. Deen Dayal Upadhyay Health Sciences University, Raipur. He was awarded Certificate of Excellence awards by the Times of India groups 2016. His work was appreciated with certificate of appreciation by Indian Dietician Association 2016. He was felicitated by Agrasen Agrawal Samaj for his excellent work in Tribal Population 2016. He was honoured with excellence award by 'Z' TV Chhattisgarh for this distinguish work in kidney disease in rural population of Chhattisgarh in 2017. He has developed a concept of Teledialysis, first of its kind in Asia. He has developed Portable dialysis Machine (MAKE-D) for 60 billion kidney patients in world who require dialysis many times in a week. He has developed an abdominal Pressure Measurement Scale, which is very useful of Continuous Ambulatory Peritoneal Dialysis Patients (type of dialysis). He has developed and economic, efficient and effective walkie talkie system for consultation and directions to the hospital staff and doctors. He has been awarded Dr. B. C. Roy National Award for his research to give Aid or Assistance to Research Project for the year 2016.

punit282004@yahoo.co.in

Notes: