



Leading European Nephrology

NEWS

European Renal Association – European Dialysis and Transplant Association

Phosphate – a “driver” of mortality in kidney patients

December 5, 2016

High phosphate concentrations are associated with an increased incidence of cardiovascular complications and mortality in the general population and in patients with chronic kidney disease (CKD). As the kidney has a key role in phosphate regulation, phosphate homeostasis is disturbed in patients with kidney disease. Many patients develop hyperphosphataemia, which is associated with poor clinical outcomes as epidemiological data consistently indicate.

In order to improve the prognosis of CKD patients two ERA-EDTA scientific working groups, the CKD-MBD (chronic kidney disease - mineral and bone disorder) working group and the European Renal Nutrition (ERN) working group, published a joint review on the role of phosphate control. Dr Marc Vervloet, first author of the paper and secretary of the CKD-MBD working group, commented: “Among all biomarkers of CKD-MBD, phosphate is most strongly associated with increased mortality.” Why is that? Hyperphosphataemia comes along with high circulating levels of FGF-23, which might directly induce left ventricular hypertrophy. On the other hand, hyperphosphataemia itself disturbs endothelial cell function and augments arterial wall calcification and valvular disease. These two parallel processes are supposed to contribute to the high burden of cardiovascular events in CKD.

Although the associations between hyperphosphatemia and poor outcomes are overwhelming, proof is still lacking that dietary or pharmacological phosphate control is beneficial. “We need properly designed trials to answer this question”, claims Vervloet.

As Dr Denis Fouque, ERN chairman, points out, dietary counselling provides an often underestimated opportunity to target the increasing exposure to dietary phosphate. “Dietary counselling is not only important for CKD patients, but for the general population, too. Food additives, for example, often “push” the phosphate levels and most people are not aware of this. What might be dangerous for the general public, is definitely dangerous for our CKD patients. This is why nutritionists and nephrologist have to collaborate closely for an effective care of these patients.”

Interested in reading the publication?

<http://www.nature.com/nrneph/journal/vaop/ncurrent/full/nrneph.2016.164.html>



Leading European Nephrology

NEWS

European Renal Association – European Dialysis and Transplant Association

About ERA-EDTA

With more than 7,500 members, the ERA-EDTA ("European Renal Association – European Dialysis and Transplant Association") is one of the biggest nephrology associations worldwide and one of the most important and prestigious European Medical Associations. It supports basic and clinical research in the fields of clinical nephrology, dialysis, renal transplantation and related subjects. The ERA-EDTA supports a number of studies as well as research groups and has founded a special "Fellowship Programme" for young investigators as well as grant programmes. In order to involve young nephrologists in all activities of the ERA-EDTA the Council decided to create a Young Nephrologists' Platform (YNP). Besides, it has established various research networks and different working groups to promote the collaboration of nephrologists with other medical disciplines (e.g. cardiology, immunology). Furthermore, a "European Renal Best Practice" (ERBP) advisory board has been established by the ERA-EDTA to draw up and publish guidelines and position statements. Another important goal of the ERA-EDTA is education: several series of CME-courses as well as the annual congress offer an attractive scientific programme to cover the need of continuous medical education for doctors working in the fields of nephrology, dialysis and transplantation. The association's journals, NDT (Nephrology, Dialysis, Transplantation) and ckj (Clinical Kidney Journal), are currently the leading nephrology journals in Europe. The ERA-EDTA Registry is a large epidemiologic database comparing countries by assessing nephrology practice throughout Europe. Finally, ERA-EDTA is member of the European Kidney Health Alliance (EKHA), a consortium of renal societies that actively interacts with the European Parliament. For more information please visit www.era-edta.org