Hypertension in Dialysis Patients

Joint Consensus Document by EURECA-m and ESH

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In patients with end-stage renal disease (ESRD) treated with haemodialysis or peritoneal dialysis, hypertension is common and often poorly controlled. This is the reason why the European Renal and Cardiovascular Medicine (EURECA-m) working group of the European Renal Association–European Dialysis and Transplant Association (ERA-EDTA) and the Hypertension in the Kidney working group of the European Society of Hypertension (ESH) prepared a joint position paper (leading author: Professor Pantelis Sarafidis, Greece) on the diagnosis and treatment of hypertension in dialysis patients, that has now been published in NDT – one of the two official journals of the ERA-EDTA.

The following recommendations are given in the paper:

For the diagnosis of hypertension in hemodialysis patients a 24h (even better 44 h) ambulatory blood pressure monitoring (ABPM) should be made during a mid-week day free of dialysis. The diagnosis should not be based on pre- or post-dialysis blood pressure. Alternatively, home blood pressure (BP) measurements can be used to diagnose hypertension.

One of the main pathogenic mechanisms of hypertension in dialysis patients is volume (and sodium) overload. This is why targeting this is fundamental for BP reduction in this population. The main non-pharmacological measures to reduce volume (and sodium) overload in hemodialysis patients are the achievement of individual patients’ dry-weight, the minimization of inter- and intradialytic sodium gain (e.g. by restriction of sodium intake to 1.5 g of sodium or 4 g of sodium chloride per day), and avoidance of short (i.e. <4 h) dialysis sessions. “These non-pharmacological interventions should be carefully implemented before considering pharmacological treatment”, explains Professor Carmine Zoccali, ndt editor-in-chief. “This is a task for the patient – he has to comply with a salt-reduced diet –, but for the nephrologist, too: he has to optimize the dialysis treatment”.

If medication is necessary, the use of β-blockers followed by dihydropyridine calcium channel blockers should be considered, while the first-line use of ACEIs and ARBs in this dialysis population is not supported by randomized trials. “Nevertheless, we have to keep in mind that the use of any antihypertensive agents is associated with improvement in
cardiovascular outcomes – and might therefore be beneficial for the patients”, comments Professor Zoccali.

As the authors of this position paper emphasize, properly designed epidemiology studies and clinical trials to define BP targets for treatment and evaluate treatment effects in this population are still needed.

Interested to read the full paper? You are just one click away!

About ERA-EDTA

With almost 7,000 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. It also 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 ERA-EDTA has the Young Nephrologists’ Platform (YNP), a very active committee whose board includes members who are 40 years old or younger. Besides, it has established various 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 was 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; furthermore NDT-Educational is the online educational journal, open for free to all uses, of the Society as well as the very important and useful feature of NDT-Educational "Literature Review". The ERA-EDTA Registry is a large epidemiologic database comparing countries by assessing nephrology practice throughout Europe. ENP, the European Nephrology Portal, is the latest new initiative of ERA-EDTA: here all those interested in the activities of the Society can find everything that is done, all in one place! Finally, ERA-EDTA is member of the European Kidney Health Alliance (EKHA), a consortium of patients, nurses, foundations all related to renal issues that actively interacts with the European Parliament. For more information please visit www-era-edta.org