Bioimpedance: Innovative Approach in Nephrology and Autoimmune Diseases

The above is expertise of renal clinic Athens-nephrology. BIA technology provides comprehensive information on the state of hydration of the patient in real time, the distribution of water intracellular and extracellular, the ratio of extracellular water relative to the total body water, and the history of the moisturizing of the patient condition. In our practice, in this way we can give useful information in patients undergoing dialysis (determination of dry weight, excess water, etc.). Alongside, these patients can get useful information in relation to nutritional support. This information may become useful in any patient leaves the hospital, especially after a long hospitalization [5].

The information provided by BIA technology include: the total amount of body water and the distribution of intracellular and extracellular, the amount of proteins, salts and fat, muscle mass and how it is distributed in the body. Finally provided important information and there is much research interest on the body cell mass, the bone content, basal metabolic rate, arm muscle circumference, etc.

After the plurality of information mentioned, BIA technology, perhaps above all, the use of multiple frequencies instead of only one, allows the physician to calculate the phase angle. Information important for patients with chronic diseases, it can be useful in their clinical course forecasting tool. It is therefore applications both in patients with chronic kidney disease have not resulted in hemodialysis or peritoneal dialysis, and patients with diabetes mellitus, autoimmune diseases, heart failure, chronic inflammations and infections, hypertension, cancers and neurological diseases as well as in athletes [5,6].

It becomes obvious that in any proper organized renal clinic, the provision of services with BIA technology is enriched with the most modern means of helping the patient with chronic kidney disease or undergoing hemodialysis or peritoneal dialysis, or not, but also a multitude of other patients with chronic mainly diseases of other specialties. With the above approach a nephrologist may help the physician of a chronic patient (diabetic, cardiac patients, rheumatologists, etc) to better monitor the clinical course of the patient and to intervene when something deemed by him necessary.

References


