ANALYTICAL EVALUATION OF AIA-PACK iPTH TOSOH ASSAY: DOES THIS METHOD FULFILL DIAGNOSTIC REQUIREMENTS?


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BACKGROUND AND AIM OF THE STUDY

The use of Parathyroid hormone (PTH) assay has become widespread. A relationship between PTH levels and the outcome of chronic heart and renal diseases has been envisaged on the basis of a number of studies. Despite the attention has been recently focused on the assay of the «whole» PTH molecule, the majority of commercially available methods are still based on the use of «intact» molecule as the antigen (iPTH). We evaluated the analytical and clinical performances of TOSOH iPTH AIA-Pack (Tokyo, Japan) and compared it to other available methods (ELSA Cis-Bio, Cedex, France; ADVIA Centaur, Siemens, Germany; Immulite, Siemens, Germany; Liaison, Diasorin, Italy).

COMPARISON OF AIA WITH OTHER COMMERCIAL ASSAYS

CONCLUSIONS

A fair overall correlation among the methods was observed, although variable systematic over- or underestimation biases exist, partially dependent upon the type of sample (serum, plasma, or forzen/thawed). A good precision of the TOSOH AIA-Pack method has been demonstrated at different PTH concentrations by dilution test. An increase of iPTH values in normal subjects with age is apparent, and should be taken into account.