Endocrine Abstracts

21st European Congress of Endocrinology
18–21 May 2019, Lyon, France

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Calcium to Phosphorus (Ca/P) ratio as an accurate index for the diagnosis of primary hyperparathyroidism (PHPT) and hypoparathyroidism (HypoPT)

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Background The diagnosis of PHPT and chronic HypoPT is still challenging, mainly due to the wide spectrum of clinical and biochemical presentation and the lack of validated diagnostic index in literature. The serum Ca/P ratio has been proposed as an accurate tool to diagnose PHPT in a small sample of patients, while no data is available about its possible application for HypoPT.

Aim To validate the serum Ca/P ratio as a diagnostic index for PHPT and to investigate its diagnostic performance in the diagnosis of HypoPT by analyzing a large series of data coming from a multicenter study.

Methods Multicenter, retrospective, case-control study, including 432 PHPT patients and 217 HypoPT patients, compared with 389 controls. Main outcomes: serum Ca, P, albumin, creatinine, parathyroid hormone (PTH) and 25-OH vitamin D (only for PHPT and controls). Statistical analysis: Comparisons among groups were performed by the nonparametric Kruskal-Wallis, followed by the Dunn’s post hoc test. The diagnostic accuracy of Ca/P ratio was investigated by receiver operator characteristics (ROC) curves in order to define cut-off points (with the highest specificity and sensitivity).

Results

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