Comment on "A smaller proportion of circulating biologically active parathyroid hormone in peritoneal dialysis does not allow inter-method adjustment of established parathyroid hormone for haemodialysis"

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To the Editor,

We have read with much interest the article by M. Luisa Gonzaléz-Casaus et al.[1] on the difficulty of performing an inter-method adjustment of parathyroid hormone (PTH) measurement in peritoneal dialysis patients due to significant differences in the quantity of biologically active PTH present in patients who receive peritoneal dialysis compared with those who receive haemodialysis. There is increasing criticism of using intact PTH as a biomarker for the monitoring and follow-up of bone turnover in patients on dialysis and a need to find new and more efficient markers[2].

The observation of the authors regarding serum BCTx (beta crosslaps) is very interesting. Table 5 of this article clearly demonstrates how, while no intact PTH assay shows significant differences between haemodialysis and peritoneal dialysis patients, these bone turnover markers do show very significant differences.

Serum BCTx are fragments that form as a result of the degradation of type I collagen that are released during osteoclastic bone resorption. BCTx are used assiduously in the monitoring of the therapeutic effectiveness of treatment with bisphosphonates and other antiresorptive drugs in the treatment of postmenopausal osteoporosis and they are capable of predicting hip fracture independently of bone densitometry[3]. These markers have a low intra-assay coefficient of variation when they are measured by ElecysR in automatic analysers. In addition, they have a good correlation with other bone markers in patients on haemodialysis and those on peritoneal dialysis[4].

In conclusion, we believe that serum BCTx are promising markers in the evaluation of bone turnover in dialysis patients and should be included in prospective longitudinal studies to analyse their capacity in predicting bone turnover assessed by bone histomorphometry.

Conflicts of interest

The author declares that he has no conflicts of interest related to the contents of this article.

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Comment on «Management of hypercalcemia after renal transplantation»

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Dear Editor,

We read with great interest the short reviews by José V. Torregrosa et Xoana Barros,[1] where the authors discussed the problem of withdrawal the calcimimetic at the time of renal transplantation (RT) which seems to be of high predictive importance in a higher prevalence of hypercalcemia and hyperparathyroidism in these patients. The authors also propose a very practical and clear algorithm for managing hypercalcemia after RT.

Cinacalcet is the only available calcimimetic agent. It was approved for the treatment of secondary hyperparathyroidism (SHPT) in dialysis patients and parathyroid carcinoma. However, cinacalcet isn't approved for RT recipients and has to be withheld at the time of transplantation.

A rebound hyperparathyroidism (HPT) may be hypothesized to occur, which may increase the risk for persistent HPT and related morbidity.[2,3]

Surprisingly, the literature on evaluating the effects of discontinuing cinacalcet at the time of RT is very scanty and limited by low patients numbers, retrospective design and data concerning clinical outcomes.[4,5]

Table 1.

Parameter	sCa [mg/dL]	sP [mg/dL]	sALP [U/L]	sPTH [pg/ml]
Before KT	8.9 (7.6-10.6)	6.7 (3.8-12.8)	152 (58-510)	689 (99-2301)
After KT	11 (10.7-13.6)	2.5 (1.9-3.7)	110 (77-388)	168 (83-866)

In context of this observation, we would like to present the results of an as yet unpublished preliminary study.

The aim of our communication was to evaluate the impact of cinacalcet therapy on mineral metabolism after RT, up to 12 months.

We identified 12 renal transplant recipients (3 females and 9 males), age 38 years (27-56) with hypercalcemia diagnosed after RT, who received cinacalcet before transplantation, dose 45mg/day (30-90) for 6 months (3-12) during hemodialysis (HD); time on HD-38 months (14-71). Multiple assessment of parameters of mineral metabolism was done before and after RT: serum calcium (sCa), phosphorus (sP), alkaline phosphatases (sALP) and intact parathyroid hormone (iPTH). Other causes of hypercalcemia were excluded. Data were presented as median and range.

Elevated sCa was found in all by the end of third month. Significant symptoms of hypercalcemia occurred in 3 pts (walking difficulties, paresthesia, depression, bone pain).

We observed significant differences in all measurements before and after RT. There was the increase in sCa, and decrease in sP, sALP, iPTH; iPTH level still remained above normal range.

Vitamin D (25(OH)D) was within the normal range.

It is worth noting that although tendency toward lowering of iPTH was noticed, increase in sCa was observed.

In conclusion, based on results of our small study, withdrawal of cinacalcet therapy at the time of RT may be a risk factor for hypercalcemia in the early post-transplant period, despite the improvement in iPTH level. In cases of severe SHPT in HD patients decisions on parathyroidectomy rather than cinacalcet therapy should be considered.

Conflict of interest

The authors declare that they have no conflicts of interest related to the contents of this article.

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B) BRIEF PAPERS ON RESEARCH AND CLINICAL EXPERIENTS

Development and use of an application programming interface modified from GoogleMaps© for the georeferencing of patients with glomerular disease

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To the Editor,

Geographic information systems (GIS) are an important epidemiological tool[1,2]. Applications have been developed based on information and communications technology (ICT) and GIS that associate patient information and the pathologies being studied. In nephrology, there are few studies, such as that by Toubiana et al.[3], that have developed a GIS for end-stage kidney disease.

Programmes that integrate GIS and epidemiology require the use of high-resolution satellite or map images at a high financial cost. In addition, converting the addresses of patients into geographic coordinates is an expensive process, since it is carried out manually. Implementing and updating a GIS in epidemiology is a laborious activity. Free applications such as GoogleMaps© are tools for mapping the information, providing high-quality satellite images and allowing an address to be associated with a geographic coordinate[4,5]. Consequently, we developed a georeferencing tool of