



Journal of Renal Endocrinology; the kidney as an endocrine organ

Renal endocrinology contains most of the important features of hormone physiology and pathology related to renal disease by looking at the kidney as an endocrine organ and endocrine sensor (1-3). However, this topic does not seem to have received due consideration (2-5). Interestingly, renal endocrinology is a dynamic, and rapidly growing, subspecialty of both nephrology and endocrinology. Endocrine and nephrology researchers, possibly, have their hands full with the pandemic of diabetes mellitus and metabolic syndrome (2-4). Nephrologists, likewise, are busy with various kidney disorders, which had a tight relation with endocrine disorder (6). In this journal we tried to highlight the actions of the kidney as the site of hormone and autacoid (functioning locally inside the kidney) catabolism and production, and as a target place for the action of nonkidney hormones. Various activities such as cellular action of prostaglandins, erythropoietin, renin-angiotensin, the kallikrein-kinin system and vitamin D, encountered the kidney as an important endocrine organ. Additionally, the renal effects of major nonrenal hormones, like parathyroid hormone, aldosterone and thyroid hormone, and also the less well-defined action of melatonin and serotonin that may be as an important part in modulating inflammatory response in injury reactions and also renal hemodynamics (5,6). In fact, it is hard to separate the endocrine features of renal disease from the science of renal disease, or the renal features of hormone function and structure from endocrine science. A more focus on the topic of endocrine nephrology or renal endocrinology will focus on “*Journal of Renal Endocrinology*.” In brief, influence of renal insufficiency on hormones are as follow: increased concentration of hormones or hormone fragments, disturbed degradation like calcitonin, insulin, parathormone. Increased secretion of insulin and parathormone. Decreased concentration due to reduced production of renal hormones such as 1, 25 vitamin D3 and erythropoietin, or extrarenal hormones like testosterone and estradiol. Additionally, disturbances of hormone action or distorted binding to carrier proteins

like somatomedins. Likewise, there may be, altered target organ sensitivity such as growth hormone or insulin.

The scientific research international *Journal of Renal endocrinology* (*J Renal Endocrinol*) is a peer-reviewed journal devoted to the promotion of treatment of endocrine aspects of the kidney. It has pursued this aim through publishing editorials, letters to the editor, hypothesis, case reports, epidemiology and prevention, reviews, mini-reviews, photoclincs, original research articles, commentaries, news and views and brief communications.



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Author's contribution

HN was the single author of the paper.

Conflicts of interest

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Ethical considerations

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■ Implication for health policy/practice/research/medical education

Journal of Renal Endocrinology, provides the insight into the role of the kidney as an endocrine organ, as the site of hormone and autacoid production and catabolism, and as a target site for the action of nonrenal hormones.

■ **Keywords:** Renal endocrinology, Parathormone, Melatonin

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