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Degree of adoption of the national consensus on chronic kidney disease in obese patients: are recommendations being followed in clinical practice?
Adoption of the consensus on ckd in obese patients

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Abstract

Chronic kidney disease is a condition that often remains unnoticed until it reaches its more advanced stages, making proactive screening essential for its diagnosis. Early detection holds particular significance for high-risk groups, such as individuals with obesity, diabetes, hypertension or the elderly. This study aimed to evaluate the degree of adoption of the recently released "Information and Consensus Document for CKD Detection and Management" among obese individuals in Spain. We examined and contrasted the insights and evaluations of 198 endocrinologists concerning their adherence to the document's key guidelines (diagnosis, screening, referral, and treatment). The results of the study reveal an underdiagnosis of CKD and deficiencies in CKD screening in the obese population in the clinical practice. On the other hand, there is a higher degree of adoption of the recommendations regarding referral and treatment criteria. The study highlights the need for improving the screening and diagnosis of CKD in high-risk populations, particularly among obese individuals, through medical education, awareness campaigns, coordination, and standardized protocols.

Keywords:

- Chronic kidney disease
- Consensus
- Obesity

Introduction

The use of recommendations in clinical practice guidelines and consensus documents significantly improves the quality of patient care and the overall efficiency of healthcare systems by supporting healthcare professionals in their clinical decisions [1-3]. This is of particular importance in conditions like chronic kidney disease (CKD), which, given its high incidence, mortality rates, and associated diagnostic and management costs, represents a significant global public health challenge [4, 5]. CKD affects 10-15% of the Spanish population [4], and between 2006 and 2016, it stood out as the second leading cause of death with the highest rise in incidence [6].

Early detection of CKD is very important for improving patient survival and quality of life, but this disease often goes unnoticed until it is in an advanced stage. Additional risk factors such as obesity, diabetes, advanced age, and hypertension also accelerate CKD onset and progression[4, 5]. Recently, a Spanish national consensus document entitled the "Information and Consensus Document for the Detection and Management of Chronic Kidney Disease" that proposes a multidisciplinary approach to managing patients with CKD has recently been published [7].

As obesity increases the risk of suffering CKD [7] and in 15%-30% of these patients could cause a glomerulopathy [8], the objective of this study is to evaluate the degree of adoption of the consensus recommendations in obese patients and identify potential areas for improvement.

Materials and methods

Our study was based on perceptions and opinions gathered from 198 endocrinologists regarding the degree of adoption of the national consensus in CKD. These inputs were

collected during the discussions that were held within a series of meetings organized by the medical department of AstraZeneca across 11 autonomous regions. The analysis focused on the different perceptions of the degree of adoption of the consensus in 3 specific areas: a) diagnosis and screening of CKD in patients with obesity, b) appropriate referral to nephrology, and c) the use of available treatments. The endocrinologists rated 3 aspects as "none", "little", "moderate", or "a lot", and 2 aspects as <10%, 10%-25%, 25%-50%, 50%-75%, or >75%. The ratings of the first aspects were normalized on a scale from 1 ("none") to 4 ("a lot") and the rest on a scale from 1 (<10%) to 5 (>75%). A national average for each aspect was developed from the averages obtained for each region.

Results

A) Diagnosis and screening

Our study reveals that 84% of endocrinologists believe that CKD is underdiagnosed in their region [Fig.1]. This is in line with the findings from other studies conducted in Spain [5, 7, 9].

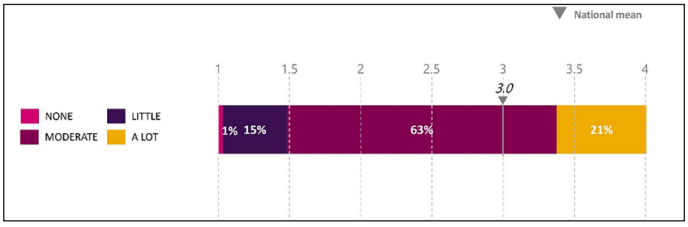

Figure 1. *Perception of the underdiagnosis of CKD*

For CKD screening 68% of these endocrinologists believe that albuminuria testing is conducted in less than 50% of patients with obesity, while 32% estimate that it is evaluated in fewer than 10% of these patients [Fig.2].

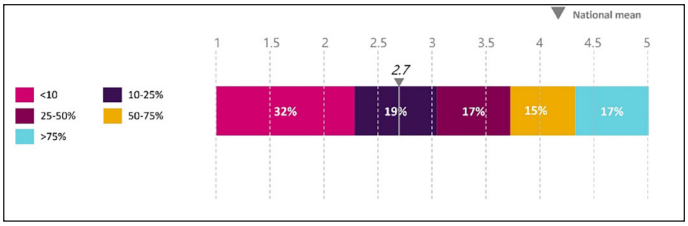

Figure 2. *Perception of the % of patients with obesity in whom albuminuria is routinely analysed by endocrinology*

Furthermore, all endocrinologists agree that albuminuria measurement in obese patients is carried out in less than 50% of cases in PC, and within this group, a significant 76% maintain that it occurs in fewer than 10% of cases [Fig.3].

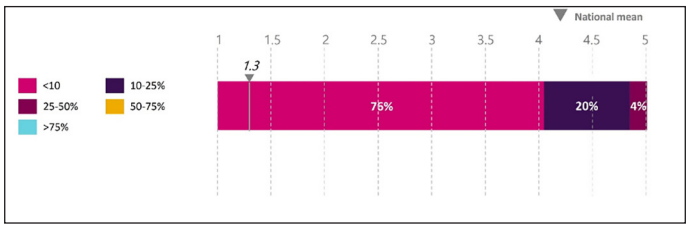

Figure 3. *Perception of the % of patients with obesity in whom albuminuria is routinely analysed in PC*

B) Referral to nephrology

The consensus document recommends referral to a nephrology department in the following cases [7]:

- Any degree of albuminuria with non-urological glomerular microhaematuria, or
- Albuminuria exceeding 300mg/g, or
- CKD stages G4 or G5 with a glomerular filtration rate lower than 30ml/min/1.73m² (excluding patients >80 years without renal progression, albuminuria less than 300 mg/g, no alarm signs, and no consideration for renal replacement therapy [RRT]).

Overall, 79% of endocrinologists believe that the referral recommendations outlined in the consensus are followed, with 27% applying them strictly and 52% to a substantial degree. On the other hand, 18% consider that they are minimal followed, and 3% that they are not followed at all [Fig.4].

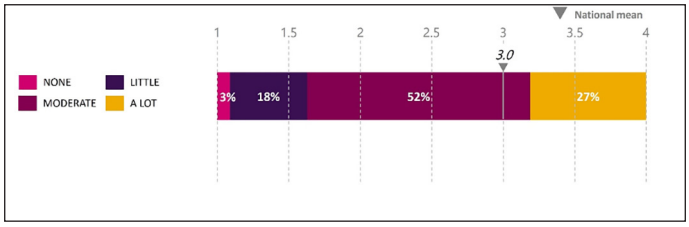

Figure 4. *Perceived compliance with referral criteria*

C) Treatment

The national consensus reflects that until now, inhibition of the renin-angiotensin-aldosterone system (RAASi) had been the only evidence in the treatment and prevention of

CKD, both in diabetic and non-diabetic patients[7]. Moreover, the consensus also adds that dapagliflozin is indicated for managing CKD, not just in type 2 diabetes, but also in non-diabetic CKD, and this indication also covers conditions like nephroangiosclerosis and IgA nephropathy[7].

Nearly all (98%) endocrinologists would deem it highly or quite suitable (59% and 39%, respectively) to use a therapeutic strategy combining RAASi with dapagliflozin from the initiation of treatment in CKD patients. A mere 2% of these professionals would consider this approach unsuitable [Fig.5].

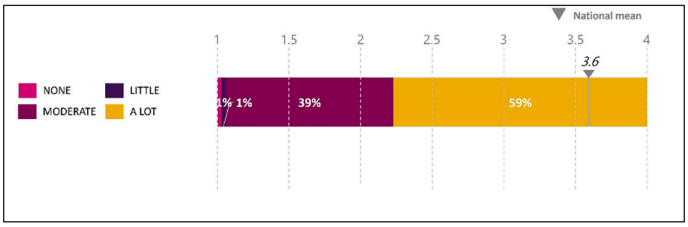

Figure 5. *Perception of the willingness to use RAASi + dapagliflozin from the initiation of treatment in patients with CKD*

Discussion

This study assesses the degree of adoption of the "Information and Consensus Document for CKD Detection and Management"[7] in obese patients in Spain. It explores the collaboration of the various medical specialists and identifies potential areas for intervention. It also aims to design future strategies to improve the diagnosis and treatment of people with CKD, supported by evidence that multidisciplinary consensus can raise the standard of patient care[1-3, 10].

Obesity leads to increased kidney hyperfiltration, potentially resulting in kidney damage[11]. Despite this risk and the consensus recommendations for screening these patients[7], endocrinologists report that appropriate screening is not being carried out neither in their speciality nor in PC. The rate of albuminuria testing in endocrinology is very low (less than 25% of patients) and almost non-existent in PC (less than 10%). These data show a lack of awareness of the importance of CKD screening in patients with obesity in Spain, despite the fact that the "CKD Framework Document of the Chronicity Strategy in the National Health System" identifies obesity as a risk factor and urges early detection[12].

On the other hand, health professionals perceive that there is a higher degree of adoption of the recommendations in relation to referral criteria and willingness to use new treatments.

These findings highlight the importance of implementing strategies focused on properly CKD screening in patients with obesity. This could involve awareness campaigns, training for healthcare professionals and scientific societies, patient awareness campaigns, early detection protocols based on risk profiles, and standardizing computerized alerts.

The multidisciplinary approach to these patients is essential, and PC constitutes a fundamental pillar in the integral care process of patients with CKD [7]. Therefore, we propose extending this project to other specialties involved in the management of these patients (primary care and nephrology) in order to analyze their degree of adoption of the recommendations of the consensus and to diagnose the integrated care process of patients with CKD, improving coordination between different levels of care and designing potential initiatives to optimize this process.

The management of patients with CKD is multidisciplinary. The main limitation of this study is that only the perception of doctors specialists in endocrinology is collected. It would be good to have the insights of other specialties, such as family medicine and nephrology.

Conclusions

- Even though obesity is one of the main risk factors for CKD, the findings of this study show a low degree of adoption of recommendations regarding the diagnosis and screening for CKD in patients with obesity established in the national consensus.
- On the other hand, a higher degree of adoption of the recommendations concerning the referral and treatment of patients with obesity and CKD is perceived.
- It is considered that this information could be useful for designing future strategies that seek to improve the diagnosis and management of CKD in the population of patients with obesity.

Acknowledges

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