



ORIGINAL ARTICLE

The relationship between the sensation of incomplete voiding and a high postvoid residual volume[☆]



A.A. Cayetano-Alcaraz^{*}, J.O. Herrera-Cáceres, A. García-Mora

Departamento de Urología, Instituto Nacional de Ciencias Médicas y Nutrición «Salvador Zubirán», Ciudad de México, Mexico

Received 16 September 2015; accepted 7 January 2016

Available online 12 April 2016

KEYWORDS

Sensation of incomplete voiding;
Postvoid residual urine;
Uroflowmetry;
Lower urinary tract symptoms

Abstract

Background: Studies have shown that voiding symptoms do not correlate with a high postvoid residual volume. It is important to have clinical tools that help make early and effective decisions during the initial consultation.

Objective: To assess the validity and degree of concordance between the sensation of incomplete voiding and high postvoid residual volume.

Materials and methods: Cross-sectional study of patients who underwent uroflowmetry (UFM) and postvoid residual volume (PVR) measurement due to lower urinary tract symptoms, with simultaneous scoring of International Prostate Symptom Score (IPSS), the International Consultation on Incontinence Questionnaire – Female Lower Urinary Tract Symptoms (ICIQ-FLUTS) or Male Lower Urinary Tract Symptoms (ICIQ-MLUTS) during 2014–2015. We analyzed the relationship between these data and the postvoid residual volume.

Results: The study included 303 patients, 75 (24.8%) of whom were women and 228 (75.2%) of whom were men. The mean age was 60.9 years (SD, 15.8), and the mean Qmax was 14.47 mL/s (SD, 9.6). Sixty (19.8%) patients had a high PVR. We detected 240 (79.2%) patients with sensations of incomplete voiding (SIV), but its presence was not associated with a high PVR in the population. For the SIV, the sensitivity, specificity, positive and negative predictive values and positive and negative likelihood ratios were 81.6%, 21.3%, 20.4%, 82.5%, 1.03 and 0.85, respectively. The area under the curve for the frequency of SIV was 0.52 (95% CI, 0.44–0.60, $p=0.5$). The degree of concordance between SIV and high PVR was 0.014 ($p=0.6$). In the ICIQ-MLUTS, PVR correlated with intermittence ($Rho=0.132$, $p=0.043$) but not with SIV ($Rho=0.09$, $p=0.15$). In the ICIQ-FLUTS, the frequency of urinary incontinence was positively correlated with PVR ($Rho=0.216$, $p=0.026$).

Conclusions: The sensation of incomplete voiding is not associated with a high postvoid residual volume. Other variables such as symptom severity, urinary effort and total score for voiding symptoms can be associated with a high residual urine volume.

© 2016 AEU. Published by Elsevier España, S.L.U. All rights reserved.

[☆] Please cite this article as: Cayetano-Alcaraz AA, Herrera-Cáceres JO, García-Mora A. La relación entre la sensación de vaciado incompleto y un residuo posmiccional elevado. Actas Urol Esp. 2016;40:309–316.

^{*} Corresponding author.

E-mail addresses: axelcayetano@icloud.com, axelcayetano@gmail.com (A.A. Cayetano-Alcaraz).

PALABRAS CLAVE

Sensación de vaciamiento incompleto; Orina residual posmiccional; Uroflujometría; Síntomas de tracto urinario inferior

La relación entre la sensación de vaciado incompleto y un residuo posmiccional elevado

Resumen

Antecedentes: Algunos estudios han demostrado que los síntomas de vaciado no correlacionan con el residuo posmiccional elevado. Es importante contar con herramientas clínicas que permitan tomar decisiones prontas y efectivas en la primera consulta.

Objetivo: Evaluar la validez y el grado de concordancia entre la sensación de vaciado incompleto y el residuo posmiccional elevado.

Material y métodos: Estudio transversal de pacientes a los que se les realizó uroflujometría (UFM) y medición de residuo posmiccional (RP) por síntomas urinarios inferiores con determinación simultánea de IPSS, ICIQ-FLUTS o ICIQ-MLUTS durante los años 2014-2015. Analizamos la relación entre estos datos con el volumen del residuo posmiccional.

Resultados: Se incluyeron 303 pacientes: 75 (24,8%) mujeres y 228 (75,2%) hombres, con una edad media de 60,9 años (DE 15,8) y un Q_{máx} medio de 14,47 ml/s (DE 9,6); 60 (19,8%) presentaron RP elevado. Se detectaron 240 (79,2%) pacientes con sensación de vaciado incompleto (SVI) y su presencia no se asoció a RP elevado en la población. Para la SVI, la sensibilidad, la especificidad, el valor predictivo positivo y negativo, y los cocientes de probabilidad positivos y negativos fueron de 81,6%, 21,3%, 20,4%, 82,5%, 1,03 y 0,85, respectivamente. El área bajo la curva para la frecuencia de SVI fue de 0,52 (IC 95%, 0,44-0,60, $p=0,5$). El grado de concordancia entre SVI y RP elevado fue de 0,014 ($p=0,6$). En el cuestionario ICIQ-MLUTS correlacionó RP con intermitencia ($Rho=0,132$, $p=0,043$) y no con SVI ($Rho=0,09$, $p=0,15$). En el ICIQ-FLUTS la frecuencia de incontinencia urinaria correlacionó positivamente con el RP ($Rho=0,216$, $p=0,026$).

Conclusiones: La sensación de vaciado incompleto no se asocia a un residuo posmiccional elevado. Otras variables, como severidad de los síntomas, esfuerzo miccional y puntuación total de síntomas de vaciado, pueden asociarse con una orina residual elevada.

© 2016 AEU. Publicado por Elsevier España, S.L.U. Todos los derechos reservados.

Background

In the management of lower urinary tract symptoms, it is important to have clinical tools that make it possible to make prompt and effective decisions that do not depend, at least initially, on costly, invasive, or non-available studies.

The measurement of postvoid residue and uroflowmetry is a routine part in the evaluation of lower urinary tract symptoms, and these studies make it possible to monitor and correlate symptoms objectively.¹ There are places where the lack of equipment and infrastructure do not allow to fully comply with this recommendation.

The feeling of incomplete emptying is a non-specific symptom that may be a manifestation of high residual urine. The etiology of elevated residual urine is varied, ranging from organic obstruction dysfunction in the lower urinary tract bladder emptying. There is no universally accepted definition of high residual urine, and for clinical practice a volume <30 ml is considered insignificant, whereas a value persistently >50 ml is considered abnormal.

The etiology of elevated residual urine is varied, and it ranges from organic obstruction in the urinary tract to bladder emptying dysfunction. There is no universally accepted definition of high residual urine, and for clinical practice a volume <30 ml is considered insignificant, whereas a value persistently >50 ml is considered abnormal.²

It has been found that lower urinary tract symptoms in isolation do not adequately predict objective findings of urodynamic studies.³ This is true for both men and women.⁴⁻⁶ Recently, the relationship between voiding symptoms and the amount of postvoid residue has been explored especially in women.^{4,7} However, the implementation of validated scores of urinary symptoms such as the International Prostate Symptom Score (IPSS), the International Consultation on Incontinence Questionnaire-Male Lower Urinary Tract Symptoms (ICIQ-MLUTS), or the International Consultation on Incontinence Questionnaire-Female Lower Urinary Tract Symptoms (ICIQ-FLUTS) have not been used routinely in this type of studies.

Aims

Primary objective

To assess the validity and the degree of concordance between the sensation of incomplete emptying and the finding of high post-void residue.

Secondary objective

To determine if other filling and emptying urinary symptoms are associated to higher levels of post-void residual urine.

Download English Version:

<https://daneshyari.com/en/article/3845138>

Download Persian Version:

<https://daneshyari.com/article/3845138>

[Daneshyari.com](https://daneshyari.com)