

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Prostatic hyperplasia is highly associated with nocturia and excessive sleepiness: A cross-sectional study
AUTHORS	Emmanuel Chartier-Kastler, Damien Leger, Denis Comet, François Haab and Maurice M. Ohayon

VERSION 1 - REVIEW

REVIEWER	Camille P. Vaughan MD, MS Assistant Professor Emory University School of Medicine Atlanta, GA USA COI: Research grant support from Astellas
REVIEW RETURNED	27/02/2012

THE STUDY	<p>The authors excluded men with "BPH who did not complain of regular sleep disorders". This introduces bias in attempting to assess the relationship between lower urinary tract symptoms and sleep outcomes.</p> <p>The authors include multiple references to BPH in the manuscript - yet there is no confirmation of this diagnosis reported. BPH is a histological diagnosis. Benign prostatic enlargement is more accurate in the clinical setting where prostate biopsies have not been performed. Further, if the diagnosis of BPE has been confirmed only through patient self-report and not a clinician's digital rectal exam, transrectal ultrasound, or other imaging modality - it is recommended that the authors be cautious in attributing LUTS reported on the IPSS to BPE.</p> <p>The abstract references BPH multiple times - which may not be accurate in this sample based on the comments above.</p> <p>One key reference related to this topic which the authors might include is: Yoshimura K et al. Differences between bothersome and non-bothersome night-time frequency. <i>Neurouro Urodyn</i> 2007;25:1014-1019.</p>
RESULTS & CONCLUSIONS	<p>Because the authors excluded patients with BPH and no complaints of sleep, they have introduced significant selection bias in the assessment of lower urinary tract symptoms and sleep.</p> <p>The tables are relatively clear. However, the 24-hour diuresis data, which were largely non-significant, distract the reader from the main results. Also, the 1500 mL cut point for 24-hour diuresis is not well justified. Table 4 includes N values for the 24-h diuresis (n=619) that do not seem correct based on the total N of 2,179. The discussion introduced new acronyms (HGB, HBP which were not defined -</p>

	<p>seem to be BPH?)</p> <p>Again - there are references that seem relevant to this research and are not included in the discussion:</p> <p>Yoshimura K et al. Differences between bothersome and non-bothersome night-time frequency. <i>Neurouro Urodyn</i> 2007;25:1014-1019.</p> <p>Yoshimura K et al. Differences and associations between nocturnal voiding/nocturia and sleep disorders. <i>BJU Int</i> 2010; 106:232-237.</p> <p>Coyne KS et al. The prevalence of nocturia and its effect on health-related quality of life and sleep in a community sample in the USA. <i>BJU Int</i> 2003;92:948-54.</p> <p>The overall message is muddled by the references to BPH as there is no supporting evidence that these men had BPH - just lower urinary tract symptoms as reported on a validated scale.</p>
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REVIEWER	<p>Mr R Jones Consultant Urologist Musgrove Park Hospital, Taunton, UK</p> <p>No competing/conflicting interests declared</p>
REVIEW RETURNED	06/03/2012

THE STUDY	<p>Although the study population is well defined as men >40yrs with nocturia, and indeed their sleep characteristics have been extensively examined in a detailed manner, their urological assessment is too limited to make any conclusions as to symptom causality. In particular the absence of urinary frequency/volume chart does not exclude nocturnal polyuria which is known to be prevalent in this group, plus it is likely that many men in the study have overactive bladder as a cause of their nocturia (prevalence well documented eg in the EPIC study though not mentioned here). I-PSS is non-diagnostic in that it measures symptom severity and response to treatment but not the cause of LUTS, indeed it is similarly elevated in women in this age group demonstrating that a prostatic cause cannot be inferred. Any assumption that nocturia in the group described is caused by "BPH" (or worse still "prostate pressure") is misplaced and probably should be removed/rephrased.</p> <p>Key message No2: 'benign prostatic hyperplasia' is a histological diagnosis which has not been demonstrated in this group and cannot be assumed from the data. 'Men with LUTS' or possibly 'men with LUTS/BPH' would be more appropriate</p> <p>Prevalence of nocturia in over 19,000 men and women across 6 European countries was demonstrated in the EPIC study, this is a notable omission.</p>
RESULTS & CONCLUSIONS	<p>The conclusions are valid as an observational correlation between nocturia in men and certain sleep parameters that have been accurately and clearly defined. Sleep disturbance has been well characterised and the paper is of clinical interest.</p> <p>As already discussed one cannot attribute the symptom of nocturia</p>

	to BPH, indeed the cause of nocturia in this group cannot be determined from the available data. The findings are however still valid in that they relate to men with LUTS (of any cause), and this large and detailed study provides useful data in this group. A relatively minor revision would correct the problem.
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VERSION 1 – AUTHOR RESPONSE

Reviewer #1:

The reviewer underlined that we excluded men with "BPH who did not complain of regular sleep disorders". It is true. The goals of the study was to described these men who had both a sleep disorder and benign prostatic enlargement (BPE) so they can be more easily identified by their physicians.

The reviewer underlined that benign prostatic hyperplasia (BPH) is a histological diagnosis. We agree with his comment. Therefore, we have replaced in the manuscript BPH with BPE. All the patients in our study had BPE confirmed with a digital rectal exam. We have also specified it in the methodology.

We have included the references suggested by the reviewer.

We have decided to suppress Table 4 since it is not essential. The results are already presented in the text. Also, the cut point for 24-hour diuresis was arbitrarily chosen. In fact, polyuria is present when the diuresis is greater than 40ml/kg/24 hours.

Reviewer #2

This reviewer also pointed out that BPH is a histological diagnosis. As we explained earlier, we have replaced BPH with BPE, which was confirmed with a digital rectal exam.

We have included the suggested reference of the EPIC study.

Again, we agree with the reviewer that the symptom of nocturia cannot be attributed to BPH and the term was replaced in the manuscript with BPE.

VERSION 2 – REVIEW

REVIEWER	Camille P. Vaughan, MD, MS Assistant Professor Emory University Atlanta, GA, USA I have research support from Astellas.
REVIEW RETURNED	13/04/2012

The reviewer completed the checklist but made no further comment.