Overactive Bladder and Quality of life

Vejiga Hiperactiva y Calidad de Vida

María Pilar García, Natalia Muñoz Universidad de A Coruña (UDC)

Abstract

Introduction: Overactive bladder (OAB) is a problem with bladder-storage function that causes a sudden urge to urinate. The urge may be difficult to stop, and overactive bladder may lead to the involuntary loss of urine (incontinence). It represents a health disorder that in recent decades has become important because of its implications on the lives of those affected. It has a prevalence of 35% in women over 18 years, increasing this figure with increasing age; it can also affect men, but with a lower prevalence. There are multiple consequences of OAB: sexual dysfunction, increased risk of falls, mood disorders and an overall decreased quality of life. The identification of the main affected areas, is the first step in establishing a plan of action to improve the quality of life of people with OAB. Methodology: a review of databases: Web of Science, Psycinfo, Scopus and Theseus, from 2002 to 2014, on the influence of overactive bladder in the quality of life. Results: the main affected areas are: sexuality, performing daily activities, psychological (anxiety and depression) and sleep disorders. Conclusions: a special attention from healthcare professionals about OAB is needed. It would also be desirable to establish plans for prevention and intervention to reduce the consequences of the OAB and lessen their impact on the quality of life.

Keywords: overactive bladder, quality of life, sexual life

Resumen

Introducción: la vejiga hiperactiva (VH) es un problema con la función de almacenamiento de la vejiga que causa una repentina urgencia de orinar. El impulso puede ser difícil de parar, y puede conducir a la pérdida involuntaria de orina (incontinencia). Representa un trastorno de salud de reconocimiento médico y social y, en las últimas décadas, ha cobrado importancia debido a sus implicaciones en la vida de los afectados. Tiene una prevalencia del 35% en mujeres mayores de 18 años, incrementándose la prevalencia a medida que aumenta la edad; puede afectar también a hombres, pero con una menor prevalencia. Son múltiples las consecuencias de la VH: disfunciones sexuales, incremento del riesgo de caídas, trastornos del estado de ánimo y una disminución general de la calidad de vida. La identificación de las áreas más afectadas en las pacientes con VH, es el primer paso para establecer un plan de intervención que ayude a solucionar los problemas mejorando la calidad de vida de las personas con VH. Metodología: revisión bibliográfica de las bases de datos: Web of Science, Psycinfo, Scopus y Teseo desde el año 2002 hasta el 2014 sobre la influencia de la vejiga hiperactiva en la calidad de vida. Resultados: las áreas más afectadas en la calidad de vida son: sexualidad, realización de las actividades cotidianas, aspectos psicológicos (ansiedad y depresión) y alteraciones del sueño. Conclusiones: se necesita una especial atención por parte de los profesionales sanitarios

sobre la VH. Asimismo, sería conveniente establecer planes de prevención, así como de intervención para disminuir las consecuencias de la VH y menguar su impacto en la calidad de vida.

Palabras clave: vejiga hiperactiva, calidad de vida, función sexual

Introduction

Overactive bladder (OAB) is a common clinical entity that affects both men and women (Griebling, 2013). The most commonly accepted definitions used in research and clinical practice come from the International Continence Society (ICS). OAB is defined as "urgency, with or without incontinence, usually with frequency and nocturia in the absence of infection or other obvious pathology" (Griebling, 2013; Heidler, Mert, Temml, & Madersbacher, 2011; Wagg, et al., 2007). However, OAB should not be considered a normal or inevitable part of aging. Several large-scale population-based and cohort studies have demonstrated that the prevalence of OAB increases with age in both sexes. In the 7th decade of life almost 20% of men and women are affected (Heidler, Mert, Temml, & Madersbacher, 2011; Griebling, 2013).

Studies in both the USA and Europe have shown that the average prevalence of the disease is 35% in the population of women over 18. The prevalence increases with age: at 45 years, 27%; at 60 years, 27%; at 75 years, 34%, and at 80 years, 35% (Feria, Castillejos, & Arroyo, 2005). Studies in Europe show that the prevalence ranged between 12% in France and Italy, 18-19% in Germany, England and Sweden, reaching a peak of 22% in Spain (Castro, Espuña, Prieto, & Badia, 2005).

It is important to highlight other key aspects. According to a report of the Korean Continence Society, the overall prevalence of lower urinary tract symptoms (LUTS) including OAB is 12,2% in adults and 14,3% in females. Furthermore, prevalence increase with age, and rises to 18,4% in females over 40. The quality of life is affected in different aspects: social life, daily activities, sexual activities, etc.

These high figures and the effects on the quality of life justify the investigation of OAB. The objective to this study is to: identify the most affected areas in the quality of life of people with OAB.

Methodology

It was performed a review of databases: Web of Science, Psycinfo, Scopus and Theseus, from 2002 to

2014, on the influence of overactive bladder in the quality of life. Key words are: overactive bladder, quality of life, sexual life.

They were found 1027 articles of which 28 were analyzed for being relevant on the quality of life issue.

The results of the review will include: description of the instruments used in the assessment of quality of life and effects on the quality of life of people with OAB.

Results

Symptoms of OAB are associated with a reduced quality of life in different domains. Various papers have described the impact of OAB, showing the significant negative impact of urinary incontinence associated with OAB on physical, social, psychological, sexual wellbeing and daily activities (Tubaro & Palleschi, 2005; Patel, et al., 2006).

The high social impact of OAB results from the significant time loss because of physician visits, diagnostic procedures, treatment sessions and follow-up consultations. For example, behavioural treatment and physiotherapy, including pelvic floor exercises, biofeedback and electric stimulation require outpatient treatment sessions at least twice a week in the preliminary phase, with significant social and economic cost (Tubaro & Palleschi, 2005).

Davila (2002) defends that the 10 top aspects of quality of life related to incontinence are: urinary incontinence, self-concept, resignation, loss of sleep, loss of predictability, fear of embarrassing yourself in public, pity, adaptation to the daily routine, loss of self-control, priority need for strategies to prevent urinary incontinence. An intense period of anxiety and discomfort because of the possible urinary loss and shame, and worsening stress urgency, usually carry a large psychological burden and different degrees of social isolation (Willi & Neimark, 2002).

Anxiety is defined as a state characterized by the perception or interpretation of an event as threatening, which can manifest itself both physically as well as psychologically, and directly affects the health, wellbeing and quality of life of elderly people. (Teixeira, et al., 2014). Psychological variables, such us anxiety and depression, have been associated with urgency and urge incontinence symptoms and with other specific incontinence symptoms. Some investigators have suggested that psychosomatic disorders, such us anxiety, may play a role in the pathogenesis of OAB (Alfaro, et al., 2008; Kinsey, Pretorius, Glover, & Alexander, 2014; Teixeira, et al., 2014).

In relation to anxiety, it was observed that the anxiety symptoms showed a positive association with overactive bladder symptoms. These results corroborated the findings of other studies that found anxiety as a common manifestation in the elderly population (prevalence of up to 26% in people with 65 years or more), and whose prevalence increased in the presence of a chronic condition such us urinary incontinence (Teixeira, et al., 2014).

Anxiety and depression disorders are also associated with sexual dysfunction caused by OAB (Tubaro &

Palleschi, 2005). On the one hand, decreased sexual arousal is one of the most common symptoms of depression. Furthermore, anxiety causes sexual dysfunction, which is another reason to pay attention an produce effective treatments for OAB (Moríñigo, 2006). The Epidemiology of Lower Urinary Tracts Symptoms (EpiLUTS) study, including 14400 men and women showed that OAB negatively affects sexual enjoyment and activity in both sexes (Proietti, Giannantoni, Sahai, Shamim, & Dasgupta, 2012).

In a study conducted in Korea it was studied the impact of OAB on quality of life regarding role limitation, sexual life, and psychological aspects (anxiety and depression). The results are: more than 37% of participants with OAB reported moderate (31,4%) or severe (6,2%) bother of their daily life (housework, shopping, etc) owing to OAB symptoms. Of 458 participants with OAB, 19,9% reported that OAB symptoms affected their sexual life. Of 458 participants with OAB, 22,7% and 39,3% had anxiety and depression, respectively (Sang, Soo, Yoon, Oh, & Chul, 2011). Also, a nested case-control analysis of a subset of the European Prospective Investigation into Cancer and Nutrition (EPIC) study showed that men with OAB have significantly reduced sexual activity due to urinary symptoms compared with control (14% vs 4%) (Proietti, et al., 2012). But, the biggest problem in the sexual activity of women with OAB is the leakage during coitus. Coital incontinence in women with stress urinary incontinence is usually related to penetration, whereas women diagnosed with OAB experience incontinence during orgasm (Chen, Sweet, & Shindel, 2013; Ergenoglu, et al., 2013; Serati, et al., 2008)

Also, it should be stand out nocturia in patients with OAB. International Continente Society (ICS) defines nocturia when the person complains that wakes up at night one or more times to urinate. In a study of 1056 women and 397 men with OAB, 84,6% of patients had 2 or more nighttime micturition (81,4% women) (Espuña-Pons, Blasco, Pérez, & Rebollo, 2010).On the other hand, as shown in Espuña-Pons (2010), the nocturia is a problem that produces a big impact in the lives of those affected.

The overall prevalence of experience of falls is 33-50% in old age. Moon (2011) showed that falls are closely related to OAB.

To evaluate quality of life in OAB, there are several valid tools: the Overactive Bladder Satisfaction Questionnaire (OAB-S) (Piault, et al., 2008), OAB-q (Coyne, et al., 2002), SyDSF-AP (Casas, et al., 2007), the Female Sexual Function Index (FSFI) (Rosen, et al., 2000) among others.

The Overactive Bladder Satisfaction Questionnaire (OAB-S) was developed to assess patients' satisfaction with overactive bladder treatment including medications or non-pharmaceutical options such as physical therapy or biofeedback (Piault, et al., 2008).

The OAB-q was development from focus groups of men and women, clinician opinion, and a thorough literature review. The initial OAB-q consisted of 62

items (13 symptom, four general, and 44 HRQL) and was designed for self-administration. Symptom items addressed both the frequency and bother of frequency, urgency, nocturia and incontinence symptoms. HRQL items addressed: coping behaviors, work, commuting and travel, sleep, physical activities, social activities, self-esteem/psychological well-being, relationships, and sexual function (Coyne, et al., 2002).

The SyDSF-AP is a self-administered questionnaire with 20 questions. It analyzes the sexual health of women (Casas, et al., 2007).

The FSFI was developed in a series of stages. It consists of 19 items that can be classified into five sections: excitement and desire, lubrication, orgasm, satisfaction and pain and discomfort (Rosen, et al., 2000; Proietti et al., 2012).

Discussion and Conclusion

This paper reviews how OAB affects the quality of life. OAB is a prevalent and disabling condition affecting millions of people worldwide with a negative impact on patients' quality of life. The main affected areas are: falling, anxiety and depression, sexual life and daily activities (Flores & Pizarro, 2012; Tubaro & Palleschi, 2005).

The experience of living with OAB therefore extends far beyond the overt and practical. The unacknowledged self-management of the condition leads almost inevitably to social withdrawal, sometimes relationship problems and fear of engaging in the world/everyday life, potentially leading to social and psychological paralysis (Nicolson, Kopp, Chapple, & Kelleher, 2008).

Specific causes of reversible OAB symptoms should be identified and treated. With increasing knowledge of the epidemiology of OAB and assessment of their impact can improve the current means of addressing this common medical problem (Willi & Neimark, 2002).

At last but not least, all these problems affect the quality of life, so it is necessary to address them and to carry out an intervention plan for patients with OAB.

References

- Alfaro, J. V., García-Giralda, L., Guirao, L., Casas, I., Sánchez, G. A., Torralba, Y., . . . Sandoval, C. (2008). Repercusiones de los síntomas del tracto urinario inferior (LUTS) en la función sexual en atención primaria. *Rev Int Androl*, 6(2), 78-83.
- Casas, I., Guirao, L., García-Giralda, L., Alfaro, J. V., Sandoval, C., & García-Giralda, F. J. (2007). SyDSF-AP: un cuestionario de 21 ítems para aproximarnos a la salud sexual y detectar las disfunciones sexuales femeninas en Atención Primaria. Semergen, 33(1), 9-13.
- Castro, D., Espuña, M., Prieto, M., & Badia, X. (2005). Prevalencia de vejiga hiperactiva en España: Estudio Poblacional. *Arch Esp Urol*, 58(2), 131-138.
- Chen, J., Sweet, G., & Shindel, A. (2013). Urinary Disorders and Female Sexual Function. *Curr*

- Urol Rep, 14,298-308.
- Coyne, K., Revicki, D., Hunt, T., Corey, R., Stewart, W., Bentkover, J., . . . Abrams, P. (2002). Psychometric validation of an overactive bladder symptom and health-trelated quality of life questionnaire: The OAB-q. *Quality of life Research*, 11,563-574.
- Ergenoglu, A. M., Özgür, A., Mete, I., Askar, N., Meseri, R., & Petri, E. (2013). Overactive bladder and its effects on sexual dysfunction among women. *Acta Obstetricia et Ginecologica Scandinavica*, 92,1202-1207.
- Espuña-Pons, M., Blasco, P., Pérez, M., & Rebollo, P. (2010). La nocturia en pacientes con síntomas de vejiga hiperactiva. *Arch Esp Urol*, 63(5), 363-372.
- Feria, G., Castillejos, R. A., & Arroyo, J. C. (2005). Vejiga Hiperactiva. *Rev Mex Urol*, 65(1),50-54
- Flores, C., & Pizarro, J. (2012). Calidad de vida en mujeres con alteraciones del piso pélvico: revisión de la literatura. *Rev Chil Obstet Ginecol*, 77(3),175-182.
- Griebling, T. L. (2013). Overactive Bladder in Elderly Men:Epidemiology, Evaluation, Clinical Effects, and Management. *Curr Urol Rep*, 14, 418-425.
- Heidler, S., Mert, C., Temml, C., & Madersbacher, S. (2011). The Natural History of the Overactive Bladder Syndrome in Females: A Long-Term Analysis of a Health Screening Project. Neurourology and Urodynamics, 30, 1437-1441
- Kinsey, D., Pretorius, S., Glover, L., & Alexander, T. (2014). The psychological impact of overactive bladder: A systematic review. *J Health Psychol*, 1-13.
- Moon, S.-J., Tae, Y., Yong, T., Moon, H., Jung, M., Ah, S., & Youl, B. (2011). The influence of an Overactive Bladder on Falling: A Study of Females Aged 40 and Older in the Community. *Int Neurourol J*, 15,41-47.
- Moríñigo, A. (2006). La sexualidad de los mayores: disfunciones sexuales y trastornos psicosexuales. In L. Agüera, J. Cervilla, & M. Martín, *Psiquiatría Geriátrica* (pp. 632-639). Barcelona: Masson.
- Nicolson, P., Kopp, Z., Chapple, C., & Kelleher, C. (2008). It's just the worry about not being able to control it! A qualitative study of living with overactive bladder. *British Journal of Health Psychology*, 13, 343-359.
- Patel, A. S., O'Leary, M. L., Stein, R. J., Leng, W. W., Chancellor, M. B., Patel, S. G., & Borello-France, D. (2006). The relationship between Overactive Bladder and Sexual Activity in Women. *International Braz J Urol*, 32(1), 77-87.
- Piault, E., Evans, C. J., Espindle, D., Kopp, Z., Brubaker, L., & Abrams, P. (2008).

- Development and Validation of the overactive Bladder Satisfaction (OAB-S) Questionnaire. *Neurourology and Urodynamics*, 27, 179-190.
- Proietti, S., Giannantoni, A., Sahai, A., Shamim, M., & Dasgupta, P. (2012). Overactive bladder and sexual function: a nightmare couple. *BJU International*, 110(7), 921-924.
- Rosen, R., Brown, C., Heiman, J., Leiblum, S., Meston, C., Shabsigh, R., . . . D'Agostino, R. (2000). The Female Sexual index (FSFI): A Multidimensional Self-Report Instrument for the Assessment of Female Sexual Function. *Journal of Sex & Marital Therapy*, 26,191-208.
- Sang, E., Soo, B., Yoon, D., Oh, S.-J., & Chul, J. (2011). The impact of Overactive Bladder on Health-Related Quality of life, Sexual Life and Psychological Health in Korea. *Int Neurourol J*, 15,143-151.
- Serati, M., Salvatore, S., Uccella, S., Cromi, A., Khullar, V., Cardozo, L., & Bolis, P. (2008). Urinary Incontinence at Orgasm: Relation to Detrusor Overactivity and Treatment Efficacy. *European urology*, 911-917.

- Teixeira, A., Henriques, R., Barbaresco, L., Azevedo, P., Paulino Dos Santos, A., & Gomes de Oliveira, M. (2014). Relationship between anxiety and overactive bladder syndrome in older people. *Rev Bras Ginecol Obstet*, 36(7), 310-4.
- Tubaro, A., & Palleschi, G. (2005). Overactive bladder: epidemiology and social impact. *Obstetrics and Gynecology*, 17, 507-511.
- Wagg, A. S., Cardozo, L., Chapple, C., De Ridder, D., Kelleher, C., Kirby, M., . . . Vierhout, M. (2007). Overactive bladder syndrome in older people. *BJU International*, 99, 502-509.
- Willi, G., & Neimark, M. (2002). Vejiga hiperactiva: prevalencia y efectos sobre la calidad de vida. *Clínicas Obstétrica y Ginecológicas*, 1, 171-178.