



The emperor has no clothes: OAB can be cured surgically

Peter Petros¹

Received: 12 January 2022 / Accepted: 9 February 2022 / Published online: 10 March 2022
© The Author(s) 2022

Abstract

The paper by Karjalainen et al., who reviewed 2,933 pelvic organ prolapse surgeries, showed 75% cure for “bothersome” urge urinary incontinence (UUI), is more than an “Aha” moment; it is an “Emperor has no clothes” moment. Since 1976, a convention of “no surgery” for women with UUI (now overactive bladder, OAB) has become almost an article of faith. Yet, surgical cure of OAB has been known since 1997, when this journal published the first urodynamically controlled study with 20-month data: 86% cure for UUI, 85% for frequency, 80% for nocturia following pubourethral ligament (PUL) and uterosacral ligament (USL) sling repair in 85 women. This study was followed by many other publications over the years recording OAB cure. It is not that even a small fraction of the 600 million women on the planet will now undergo surgery, or that damaged ligaments are the only cause of OAB. However, knowing OAB can be cured opens the door for young creative minds to bring hope and relief to these women non-surgically, as well as surgically.

Keywords Overactive bladder · Urge · Frequency · Nocturia · Surgical cure · Uterosacral ligaments · Cardinal ligaments

Some 20–30% of women on the planet suffer from overactive bladder (OAB) and up to 50% of 80-year-old women suffer from nocturia. Human suffering and broken hips aside, some experts put the financial cost to the community at up to USD 61 billion per annum.

Since the first ICS consultation in 1976 [1] until now, learned bodies [2] have consistently advised that the pathogenesis of OAB, (urge, frequency, nocturia) was unknown [2], that no cure was possible and that surgery was contraindicated. Such comments appear to have become an article of faith, a convention that has continued despite many publications since 1976 stating otherwise.

The paper by Karjalainen et al. [3], who reviewed 2,933 pelvic organ prolapse surgeries, showed 75% cure for “bothersome” urge urinary incontinence (UUI), is more than an “Aha” moment; it is an “Emperor has no clothes” moment, a moment when the convention is forever broken.

Twenty-five years ago, in 1997, this journal published, for the first time in the literature, a study describing the surgical cure of multiple bladder symptoms following

day-care pubourethral ligament (PUL) and uterosacral ligament (USL) sling repair [4]. The study was pre- and post-operatively urodynamically controlled. The following cure rates were reported: stress incontinence (88%), UUI (86%), frequency (85%) and nocturia (80%). The study comprised 85 women with 20-month data. The methodology was prospective, with comprehensive pre- and post-operative assessment: symptoms (using a validated questionnaire), transperineal ultrasound, urodynamic tests for detrusor overactivity, flow rate, emptying time, residual urine, urethral pressure profile, cough and Valsalva transmission ratios, and pad tests. The cure rates achieved for OAB symptoms [4] were similar to those reported by Karjalainen et al. [3]. The OAB cure data by connective tissue/ligament repair [4] have been repeatedly confirmed by many surgeons since 1997.

The “Emperor moment” by Karjalainen et al. [3], uncovering an outdated convention, that OAB is not surgically curable, has a major human element. The Earth’s population in the year 2000 was 6 billion, 3 billion women, of whom 20% had OAB (600,000,000). The consequences of this convention are best considered by its effect on an individual, what it means for a desperate old woman (your mother), or worse, a desperate young woman (your wife, your daughter), to be condemned literally to a life of misery with no hope of cure, when this is not so.

✉ Peter Petros
pp@kvinno.com
https://www.integraltheory.org

¹ University of Western Australia School of Engineering and Mathematical Sciences, WA, Perth, Australia

How can “the Emperor be dressed”? The first step for all concerned is to cease forthwith statements to the effect that OAB is not surgically curable. Next, it is important for all surgeons in the field to apprise themselves of the many works reporting OAB cure, and, more importantly, *the anatomical basis for it*. Of particular interest in this era of mesh bans is an important paper by Shkarupa et al. [5] in women with first- and second-degree prolapse repaired solely by native cardinal/uterosacral ligament repair without vaginal excision [5]. Shkarupa et al. demonstrated similar OAB cure rates to Karjalainen et al., *but only in premenopausal women*. By 18 months, the cure rates for the postmenopausal group had fallen below 20% as against a 67.5% cure for UUI and 87.5% for nocturia in the premenopausal group. The difference was attributed to collagen breakdown in the postmenopausal group. They advised use of posterior slings in postmenopausal women, which work by the creation of new collagen by the inserted tapes, literally a reverse tension-free vaginal tape, as in Petros [4].

The multicentre USL sling paper by Liedl et al., “*Is overactive bladder in the female surgically curable by ligament repair?*” reports 12-month 85% OAB cure in 611 women, mean age 70 years, following posterior sling surgery. It is of interest for their discussion of the anatomical basis for their OAB cures [6]. The principles of cure discussed [6] remain valid for any method, surgical or non-surgical. As regards *available* non-sling surgery, my own experience indicates the native vaginal ligament repairs (see the videos), would give similar results to those of Karjalainen et al. [3] and Shkarupa et al. [5]: cardinal ligament repair <https://youtu.be/aJDPOELZZfc>; USL repair: <https://www.youtube.com/watch?v=MGLdYHtqxzg>

Although this editorial concerns ligament laxity as a cause of OAB symptoms, ligaments are clearly not the full story. A multitude of anatomical causes can activate an uncontrolled micturition (OAB), bladder infections, tumours, cervical fibroids and neurological lesions such as multiple sclerosis. Nor is it feasible for even a fraction of 600 million women to be surgically cured.

The study by Karjalainen et al. [3] has broken an outdated convention, that OAB is not surgically curable, given hope to women sufferers and opened the door for young creative minds to discover a plethora of innovative methods to bring hope and relief to women non-surgically, as well as surgically.

Financial assistance None.

Funding Open Access funding enabled and organized by CAUL and its Member Institutions

Declarations

Conflicts of interest None.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

1. Bates P, Bradley WE, Glen E, et al. International Continence Society, first report on the standardisation of terminology of lower urinary tract function. *Br J Urol*. 1976;48:39–42.
2. Koelbl H, Igawa TY, Salvatore S, et al. Pathophysiology of urinary incontinence, faecal incontinence and pelvic organ prolapse. In: Abrams P, Cardozo L, Khoury S, Wein A, editors. *Fifth international consultation on incontinence*. Bristol: International Consultation on Urological Diseases; 2013. p. 261–360.
3. Karjalainen PK, Tolppanen AM, Mattsson NK, et al. Pelvic organ prolapse surgery and overactive bladder symptoms—a population-based cohort (FINPOP). *Int Urogynecol J*. 2022;33:95–105. <https://doi.org/10.1007/s00192-021-04920-w>.
4. Petros PE. New ambulatory surgical methods using an anatomical classification of urinary dysfunction improve stress, urge, and abnormal emptying. *Int Urogynecol J*. 1997;8(5):270–8.
5. Shkarupa D, Zaytseva A, Kubin N, Kovalev G, Shapovalova E. Native tissue repair of cardinal/uterosacral ligaments cures overactive bladder and prolapse, but only in premenopausal women. *Cent European J Urol*. 2021;74:379–81.
6. Liedl B, Inoue H, Sekiguchi Y, et al. Is overactive bladder in the female surgically curable by ligament repair? *Cent European J Urol*. 2017;70:51–7.

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.