

The silent epidemic of urogenital atrophy

BACKGROUND

Urogenital atrophy describes the multiple changes in urogenital tissue quality, commonly due to hypoestrogenism associated with the menopause and ageing. These changes can result in pain and bleeding, most notably in association with sexual intercourse. The impact of urogenital atrophy on sexual function is determined by several factors, including a reduction in blood flow to the vulva and vagina, and a decrease in vaginal secretions. Sexual intimacy remains an important aspect of relationships for older women and enquiry about symptoms of urogenital atrophy should be routinely included in all consultations about menopause and in women aged ≥ 45 years attending for cervical screening. This would help to remove a major barrier, restricting access to diagnosis and treatment for affected women, who find the subject difficult to broach.

Other hurdles to accessing treatment include limited research, the cost of treatment, and patients' fear of hormonal treatment options.¹

PREVALENCE, IMPACT, AND PATHOPHYSIOLOGY

There are several key research surveys that demonstrate valuable information that could aid in advancing current clinical practice. These include the European REVIVE Survey² and VIVA-LATAM.³ The REVIVE survey

"... enquiry about symptoms of urogenital atrophy should be routinely included in all consultations about menopause and in women aged ≥ 45 years attending for cervical screening."

was conducted in Germany, Spain, Italy, and the UK (3768 postmenopausal women aged 45–75 years participated), while the VIVA-LATAM survey was conducted in Latin American countries including Argentina, Brazil, Chile, Colombia, and Mexico (2509 women aged 55–65 years participated). Both surveys were designed to establish awareness of the effect of lack of estrogen on urogenital tissue quality. The findings confirmed that women wanted advice, but treatment, particularly vaginally-delivered hormone therapy, was only offered proactively in a small proportion of cases. Both surveys confirmed that urogenital atrophy is under-recognised, underdiagnosed, and undertreated — a silent epidemic.⁴

Raising awareness in primary care will have the greatest potential impact on patient experience. This was echoed by the findings in another survey, CLOSER,⁵ which highlighted the adverse emotional and physical impact of urogenital atrophy on postmenopausal

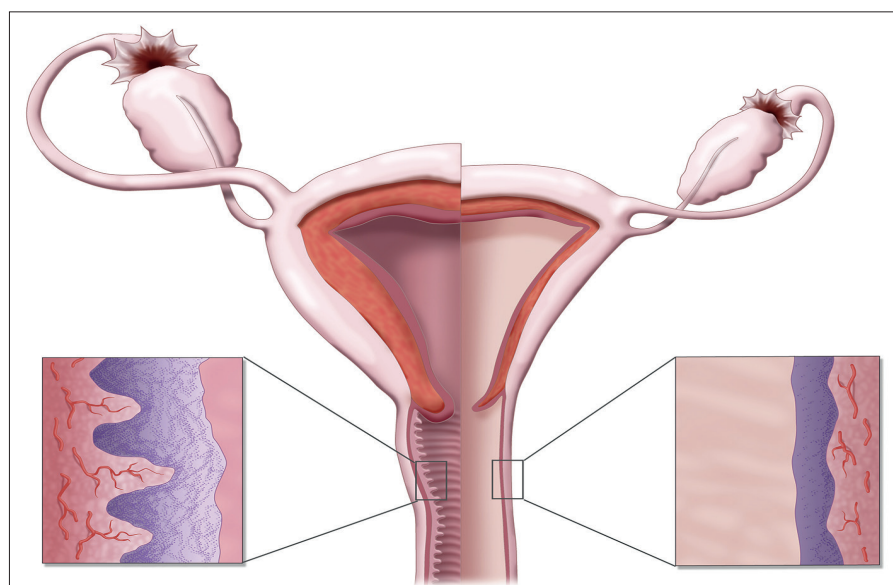
women and also their partners, with vaginal dryness and dyspareunia associated with loss of arousal and desire. AGATA,⁶ a study involving 913 Italian women demonstrated prevalence rates between 65% and 84%, and again concluded that urogenital atrophy is a common condition, which is underdiagnosed and therefore undertreated. However, a follow-up study by the same group, undertaken in a subset of already diagnosed women, highlighted a lack of consistency in the management of the condition from a clinician perspective, and lack of compliance with treatment from a patient perspective.⁷ This further reinforces the need for education of both clinicians and patients, as well as the need for a validated, objective method of assessment to assist in diagnosis and a clear treatment pathway.^{8–9} To ensure the greatest impact, any such assessment tool must be available and acceptable to primary care clinicians.

The number of women affected with urogenital atrophy increases year on year from menopause, due to the progressive effect of estrogen deficiency. The Stages of Reproductive Ageing Workshop (STRAW)¹⁰ suggested that symptoms of urogenital atrophy are likely to present between 3 and 6 years after last menstruation, although presentation can occur at an earlier time. Affected women may not associate their symptoms with the menopause, particularly when there is a long period of time between the cessation of menstruation and the appearance of symptoms. They may assume symptoms are a normal consequence of ageing and therefore not amenable to treatment.

Symptoms. These include vulvovaginal itching, burning, dyspareunia, and urinary symptoms, including recurrent urinary tract infections.

Clinical assessment/clinical signs. Estrogen is responsible for the pink colour and

Figure 1. Left: healthy vaginal mucosa. Right: vaginal mucosal in woman suffering from atrophic changes secondary to estrogen deficiency. Credit: Monica Schroeder/Science Source/SCIENCE PHOTO LIBRARY



“... urogenital atrophy is a common, underdiagnosed, and poorly managed condition, which places a huge burden on many women and their partners.”

secretions seen in a normal healthy vaginal mucosa (Figure 1). Discharge and odour can occur due to an overgrowth of vaginal commensal organisms (associated with an increase in vaginal pH of >5). Other potential changes include resorption and fusion of the labia minora, and the urethra can become more prominent. Vaginal rugae may be lost postmenopause due to collagen breakdown. The vagina can be shortened and there may be associated prolapse. Other urogenital conditions including eczema, psoriasis, lichen sclerosus, lichen planus, vulval intraepithelial neoplasia, and cancer can cause similar symptoms and therefore examination is important.

Treatments. An accurate diagnosis enables provision of appropriate treatment options. These include vaginal lubricants and moisturisers, both of which are available with or without a prescription. Urogenital atrophy is best treated with vaginally delivered estrogen, either as estradiol (10 mcg vaginal tablets or impregnated vaginal ring) or the weaker estrogen, estriol, which is available as a cream, a waxy pessary, or an oily gel. The type of vaginal estrogen used will depend on patient preference.

For women with marked symptoms, the usual twice-weekly maintenance treatment indicated with most vaginal estrogen preparations may be insufficient and more frequent application can be provided outside of the product licence. Androgens are also important, but there are no vaginal androgen products available and use of vaginal dehydroepiandrosterone (DHEA), a precursor hormone that is converted in the vaginal mucosa into estrogen and testosterone, is the only available option. DHEA is a relatively new treatment option, delivered vaginally daily as a 6.5 mg pessary.

Another new licensed treatment option is the selective estrogen receptor modulator, Ospemifene, which is taken orally in a daily dose of 60 mg. Both DHEA and ospemifene may not yet be widely available on prescription via primary care. Laser therapy treatments, including CO₂ (microablative) and Erbium YAG (non-ablative photothermal) are more invasive treatments that are delivered every 4–6 weeks, with three treatments initially, followed by a single annual treatment. However, better-

quality and more robust evidence is required from randomised controlled trials with sham laser as a comparator.

CONCLUSION

In summary, urogenital atrophy is a common, underdiagnosed, and poorly managed condition, which places a huge burden on many women and their partners. Current evidence indicates an urgent need to develop an accessible and objective method of diagnosis that is patient centric. This will not only facilitate early diagnosis and initiation of the available treatment options, ideally in primary care, but will also support research to further improve the management of urogenital atrophy that could benefit millions of women.

Paula Briggs,

Consultant in Sexual & Reproductive Health, Liverpool Women's Hospital NHS Foundation Trust; Department of Women's and Children's Health, Institute of Life Course and Medical Sciences, University of Liverpool, Liverpool, UK.

Gayathri Delanerolle,

Researcher, Nuffield Department of Primary Care Health Sciences, University of Oxford, Oxford, UK.

Rachel Burton,

FY3 Doctor, Department of Women's and Children's Health, Institute of Life Course and Medical Sciences, University of Liverpool, Liverpool, UK.

Jian Qing Shi,

Professor of Statistics, Department of Statistics and Data Science, Southern University of Science and Technology, Guangdong, China; The Alan Turing Institute, London, UK.

Haitham Hamoda,

Consultant Gynaecologist, King's College Hospital, London, UK.

Dharani K Hapangama,

Professor of Gynaecology, Department of Women's and Children's Health, Centre for Women's Health Research, Institute of Life Course and Medical Sciences, University of Liverpool, UK.

Provenance

Commissioned; externally peer reviewed.

Competing interests

The authors have declared no competing interests.

DOI: <https://doi.org/10.3399/bjgp21X717725>

ADDRESS FOR CORRESPONDENCE

Paula Briggs

Liverpool Women's Hospital, Crown Street, Liverpool L8 7SS, UK.

Email: paula.briggs@lwh.nhs.uk

REFERENCES

1. Chang OH, Paraiso MFR. Revitalizing research in genitourinary syndrome of menopause. *Am J Obstet Gynaecol* 2019; **220(3)**: 246.e1–246.e4.
2. Nappi RE, Palacios S, Panay N, *et al.* Vulvar and vaginal atrophy in four European countries: evidence from the European REVIVE Survey. *Climacteric* 2016; **19(2)**: 188–197.
3. Nappi RE, de Melo NR, Martino M, *et al.* Vaginal Health: Insights, Views & Attitudes (VIVA-LATAM): results from a survey in Latin America. *Climacteric* 2018; **21(4)**: 397–403.
4. Nasreen SZA, Shahreen S, Huq S, Huq S. Genito urinary syndrome of menopause (GSM) or vulvo-vaginal atrophy (VVA): an unspoken sorrow. *Am J Intern Med* 2019; **7(6)**: 154–162.
5. Domoney C, Currie H, Panay N, *et al.* The CLOSER survey: impact of postmenopausal vaginal discomfort on women and male partners in the UK. *Menopause Int* 2013; **19(2)**: 69–76.
6. Palma F, Volpe A, Villa P, *et al.* Vaginal atrophy of women in postmenopause. Results from a multicentric observational study: the AGATA study. *Maturitas* 2016; **83**: 40–44.
7. Palma F, Xholli A, Cagnacci A. Management of vaginal atrophy: a real mess. Results from the AGATA study. *Gynecol Endocrinol* 2017; **33(9)**: 702–707.
8. British Menopause Society (BMS). *Urogenital atrophy, consensus statement*. BMS, 2021.
9. Briggs P, Hapangama DK. Urogenital atrophy: the 'unknown factors' challenging current practice. *Post Reprod Health* 2021; **27(2)**: 109–119.
10. Panay N, Briggs P, Kovacs G, eds. *Managing the menopause*. Cambridge: Cambridge University Press, 2020.