

Atrophic vulvovaginitis in women aged 50 years and above, both current and non-users of hormone replacement therapy, attending a genitourinary medicine clinic

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(Accepted 21st September 2001)

The Journal of Family Planning and Reproductive Health Care 2002; **28**(3): 135-136

Abstract

Introduction. In women aged 50 years and over attending a genitourinary medicine (GUM) department the commonest presentation was with symptoms of vulval soreness, irritation or dryness. Atrophic vulvovaginitis (AVV) was the commonest diagnosis made. This study was undertaken to determine if the presence of AVV was related to the use, or not, of systemic hormone replacement therapy (HRT).

Method. A prospective study was made of all women aged 50 years and over attending a GUM department over a 3-month period.

Results. Of the 124 women seen in this age group, 60 (40%) had AVV and 28 (23%) had vaginal candidiasis. No difference was found in current users or non-users of HRT.

Conclusion. Accurate diagnosis is essential in women with vulval symptoms to ensure that appropriate therapy is given. In the present study symptomatic women aged 50 years and over were more likely to have AVV than candidiasis irrespective of their use of systemic HRT.

about the possible long-term increased risk of breast cancer associated with its use. Overall it is thought that 10–40% of all postmenopausal women have symptoms of AVV³ which include irritation, soreness and dryness, lower urinary tract problems and dyspareunia. Many self-treat with, or are inappropriately prescribed, antifungal preparations.

Method

This was a prospective study of all women in the 50 years and over age group attending the Portsmouth GUM Department from 1 January 1999 to 31 March 1999 for the first time or as re-referrals. Case notes were reviewed on the day of each attendance and again at the end of the study period for demographic and clinical data collected routinely during patient consultations. All women were examined vaginally. Specimens were taken for immediate Gram staining and microscopy by drawing a plastic loop down the upper half of both lateral vaginal walls. Swabs for *Candida* culture were also obtained. A diagnosis of AVV was made from the history, clinical appearance, vaginal pH and the proportion of superficial, intermediate and parabasal cells seen on microscopy (maturation value).⁴

Oestriol cream or 17- β -oestradiol vaginal tablets were used to treat women with AVV who were then seen for follow-up at 6 and 12 weeks or until their symptoms were fully resolved.

Results

During the 3-month study period 124 women aged 50 years or over were seen. The average age was 57.3 years (range 50–80 years). Of these, 56 (45%) were currently using HRT, 15 (12%) had used HRT in the past and 53 (43%) had never used HRT, although two women had been prescribed vaginal oestriol cream. Their general practitioner (GP) had referred 51 (41%) women, 48 (39%) had self-referred, 11 (9%) had come from family planning and four (3%) from psychosexual clinics, four (3%) from gynaecology and six (5%) from various other sources.

Of the women using HRT, 35 (62%) complained predominately of vulval symptoms and 21 (38%) were diagnosed as having AVV. Fifteen (27%) had had a hysterectomy. Among the non-users, 46 (68%) complained of vulval symptoms and 29 (43%) had AVV. Fifteen (22%) had had a hysterectomy. Candidiasis was diagnosed in nine (16%) of the HRT users and nine (13%) of the non-users. Five women in each group had both AVV and candidiasis. Overall, 60 women (40%) were found to have AVV. Over

Key message points

- Atrophic vulvovaginitis (AVV) can exist despite the use of adequate systemic hormone replacement therapy (HRT).
- Candidiasis is less common as a cause of vulval symptoms in peri/postmenopausal women than AVV.
- AVV responds well to local oestrogen therapy.

Introduction

The present report arose from a larger investigation, reported elsewhere,¹ to identify the reasons for attendance of both men and women aged 50 years and over at the Portsmouth Genitourinary Medicine (GUM) Department. It was found that in the women atrophic vulvovaginitis (AVV) was the commonest diagnosis made, and this further study on the same cohort of women was undertaken to determine what effect, if any, the use of systemic hormone replacement therapy (HRT) had on the presence of this condition.

Systemic HRT is being used by increasing numbers of women in the UK for the treatment of menopausal symptoms. However it is estimated that 10–25% of these women still experience urogenital atrophy,² despite otherwise adequate replacement, and may benefit from the use of additional local low-dose oestrogen preparations. Many other women prefer not to take HRT because of side effects such as vaginal bleeding or because of anxieties

90% of symptomatic women had previously used or been prescribed at least one antifungal preparation.

Last sexual intercourse had occurred within the previous 3 months in 28 (50%) of the HRT users and 31 (46%) of the non-users. Only two women stated that this had been outside a long-term stable relationship. Overall, 44 (79%) of the HRT users and 52 (77%) of the non-users had had intercourse in the previous year.

Seventeen women with AVV using HRT were treated with oestriol cream and four with 17- β -oestradiol vaginal tablets and their systemic HRT was changed in three cases. Women with AVV not using HRT were treated with oestriol cream in 25 cases and 17- β -oestradiol vaginal tablets in three cases and only one commenced systemic HRT. All women with both AVV and candidiasis, whether HRT users or not, were treated with oestriol cream and an antifungal preparation.

Of the 58 women attending the 12-week follow-up visit, 47 (81%) were asymptomatic and all the remainder had improvement in their symptoms. These 11 women continued on local oestrogen therapy and all but one had resolution of her symptoms by 6 months. Only two women were lost to follow-up at this stage.

Table 1 Summary of study results comparing hormone replacement therapy (HRT) users and non-HRT users

	HRT users (%)	Non-HRT users (%)
Vulval symptoms	35 (62)	46 (68)
Post-hysterectomy	15 (27)	15 (22)
Atrophic vulvovaginitis (AVV)	21 (38)	29 (43)
Candidiasis	9 (16)	9 (13)
AVV and candidiasis	5 (9)	5 (7)
Intercourse in last 3 months	28 (50)	31 (46)
Intercourse in last year	44 (79)	52 (77)
Total number of women	56	68

Discussion

Vulval problems were the commonest reason for attendance in the study. These may account for the lower level of sexual activity of the women, almost exclusively in long-term relationships, than would be expected from the Sexual Attitudes and Lifestyles Study. Vulval symptoms are non-specific and genital infections (including *Candida*), dermatological disorders and oestrogen deficiency are among the many causes. Accurate differential diagnosis is essential to allow effective treatment but often, as found in the present study, candidiasis is the only cause initially considered. Use, or not, of HRT was found to make no difference to the likelihood of a diagnosis of AVV or candidiasis. The use of low-dose vaginal oestriol cream or 17- β -oestradiol tablets in women with AVV has been well documented over the past two decades. Studies have shown both to be efficacious and safe in long-term use^{5,6} with no endometrial proliferation^{7,8} and no increased risk of neoplasia as may occur with other vaginal oestrogen preparations. Thus they can be used without progesterone in women with an intact uterus. This study shows that in women aged 50 years and over presenting with vulval symptoms AVV is the most likely diagnosis whether or not systemic HRT is currently used.

Conclusion

In women presenting with vulval symptoms accurate diagnosis is essential to allow appropriate therapy. In women aged 50 years and over, whether systemic HRT users or not, the most likely cause of vulval problems is AVV rather than candidiasis. AVV responds well to local oestrogen application.

Statements on funding and competing interests

Funding. None declared.

Competing interests. None declared.

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