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LETTER TO EDITOR INTERTRIGINOUS DERMATITIS

Extensive Intertrigo and Irritant Contact Dermatitis of Groins in Pregnant Female Due to Overuse of Feminine Hygiene Products

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ABSTRACT

This article explores the common skin condition of intertrigo, exacerbated by factors like obesity and the use of intimate hygiene products. Here, we present an obese pregnant woman with extensive intertrigo and irritant contact dermatitis due to prolonged use of feminine hygiene washes. Discontinuation of harsh products and a tailored treatment regimen led to significant improvement within a week. The discussion highlights the potential risks associated with overusing intimate hygiene products, emphasizing the need for education on female intimate hygiene. The study contributes valuable insights for promoting women's overall health.

Keywords: Intertrigo, Obesity, Pregnancy, Feminine Hygiene Products, Dermatitis

Dear Editors,

Intertrigo or intertriginous dermatitis is a common skin condition that occurs when skin folds in regions prone to friction, such as the armpits, groin, under the breasts, and between the buttocks, etc., become inflamed. Obesity heightens the risk due to amplified friction and moisture in these skin folds. Intimate wash products containing harsh chemicals, fragrances, and preservatives can cause irritation of the skin and contribute to the development of intertrigo.

Here, we report a case of extensive intertrigo with irritant contact dermatitis in an obese female after prolonged use of female intimate hygiene wash products. A 30-year-old obese female, weighing 110 kg, in the third month of her pregnancy, came with complaints of raw, reddish skin of groin folds and vulva associated with intense burning and itching for two weeks. A week ago, she had sought help from a local practitioner who failed to identify the cause and prescribed a topical steroid cream for relief. However, the patient only experienced slight improvement and decided to see a specialist due to persistent symptoms. Observing the inflamed appearance of the lesions, we strongly suspected contact dermatitis to some personal use item and thus inquired the patient about her habits and use of various products in the affected area. It was revealed that she had been using a particular intimate hygiene wash excessively, about three to four times daily for a month, leading to the development of the lesions within 10 days of its use.

On examination, there was extensive inflammation with considerable maceration of the skin of the vulva, mons pubis, and bilateral groins, with few erosions over an intensely erythematous base associated with a foul odor [Figures 1a and b]. Based on this history and clinical examination, a

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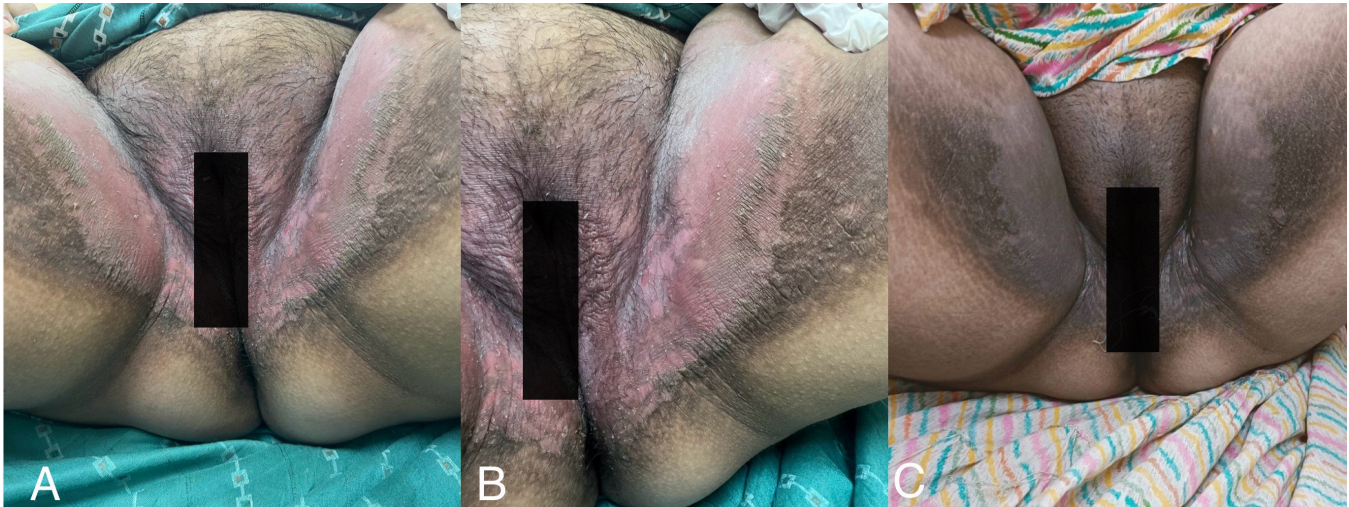


Figure 1: (a) Clinical examination of vulva and groins at the time of presentation. Extensive inflammation with maceration of the skin of the vulva, mons pubis, and bilateral groins. (b) Erosions in groins at the time of presentation. Multiple erosions over intensely erythematous base noted in bilateral groins. (c) Clinical examination of vulva and groins after one week of treatment. Near total resolution of lesions after seven days of treatment.

diagnosis of intertrigo with added irritant contact dermatitis was made, and appropriate treatment was commenced.

The patient was advised to discontinue the use of the intimate washes immediately and start once daily application of sodium fusidate 2% cream, dusting of clotrimazole powder in skin folds after bathing, and nightly application of clotrimazole 1% cream. Once a week, low-dose (200 mg) oral fluconazole was prescribed keeping in mind the gestational age of the patient. This regime resulted in near total resolution of the lesions in a mere seven days, confirming the diagnosis [Figure 1c]. This rapid response was attributed partially to treatment and partially to discontinuing the triggering agent.

Intertrigo is a prevalent inflammatory skin condition resulting from friction between adjacent skin surfaces in intertriginous regions. Obesity increases the likelihood of developing intertrigo. Obese individuals have a larger body fold surface area, providing a larger space for friction. They also tend to perspire more within these body folds resulting in increased moisture retention. Also, the skin of those with a BMI exceeding 25 is discovered to be more alkaline, increasing the susceptibility to superinfections.^[1,2]

Due to the increasing popularity of feminine hygiene products, more women have started incorporating a variety of intimate hygiene products into their daily cleansing rituals. Numerous products are available for cleanliness and odor control, but they need to be used with caution as some may disrupt the essential pH level and microbiota of the vulvovaginal region, crucial for safeguarding against infections.^[3,4] The key ingredients in the product being used by our patient were

lactic acid, triethanolamine lauryl sulfate, ammonium lauryl sulfate, cocamidopropyl betaine, phenoxyethanol, benzoic Acid, polyquaternium-7, and fragrance.

Constituents of female intimate washes and wipes that are commonly implicated in the development of irritant contact dermatitis include fragrances, preservatives like parabens, and surfactants like sodium lauryl sulfate, which strip the skin of its natural oils and cause irritation. Their overuse may cause irritation and thus contribute to the development of intertrigo as well as contact dermatitis as was seen in our case.^[5]

Thus, it is essential to choose intimate washes that are specifically formulated for sensitive skin and maintain a pH balance suitable for the vaginal area. In addition, using these products sparingly and avoiding overuse can help prevent irritation.

CONCLUSION AND GLOBAL HEALTH IMPLICATIONS

Despite ample literature on the internal vaginal environment, information on the external vulva and its response to intimate personal hygiene practices is relatively limited. While some products address specific needs and concerns, others may be more of a marketing strategy. Through this case, we wish to throw light upon the potential adverse effects of overuse of over-the-counter intimate hygiene products and the crucial need for education on the significance and potential risks of female intimate hygiene in order to promote the overall health of women.

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COMPLIANCE WITH ETHICAL STANDARDS

Conflicts of Interest

The authors declare no competing interests.

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Ethics Approval

Not applicable.

Declaration of Patient Consent

The authors certify that they have obtained all appropriate patient consent.

Use of Artificial Intelligence (AI)-Assisted Technology for Manuscript Preparation

The authors confirm that there was no use of artificial intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

Disclaimer

None.

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