Importance of Dermoscopy to Diagnose Vulvar Vestibular Papillomatosis vs. Warts

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A 29 year old healthy, married, nulliparous female, was referred by a gynecologist for genital warts. She presented with a history of asymptomatic, multiple painless growths in vulva/vagina with finger-like projections. The lesion was noticed after marriage and was very gradually increasing in size. She did not suffer from any discomfort, or bleeding during sexual intercourse.

She had a monogamous relationship with her husband and gave no history of any extramarital or premarital sexual contacts. On examination, vulva appeared normal except for the lesions she was complaining about. There were no vulval or vaginal ulcers. Examination of the vestibule and inner aspect of right labia minora revealed skin colored translucent, papules some of which appeared digitate. They were soft to feel, non-tender, and did not bleed on touch. Few lesions looked quite similar to elongated pearly penile papules (PPP), which appear in males [Figure 1].

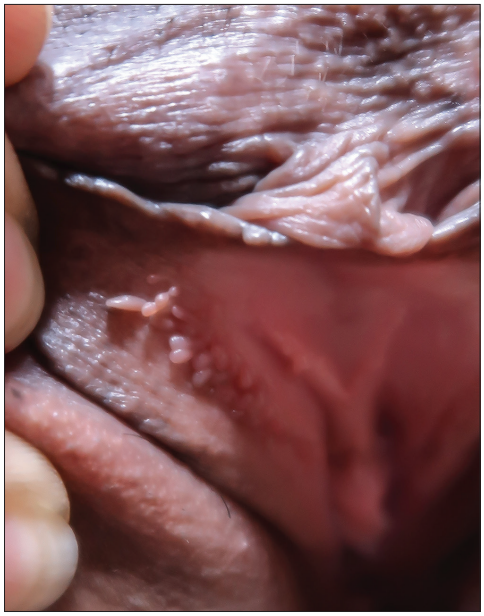

Figure 1: Multiple pink colored, translucent, digitate papules present on inner aspect of right labia minora

Dermoscopy under polarized light with DermLite™ DL200 Hybrid dermoscope (3Gen) confirmed the presence of profuse and irregular vascular channels in multiple cylindrical filiform projections. The bases of the individual projections remain separate [Figure 2]. There was no keratotic growth; nor colored dots suggestive of thrombosed vessels, thus, confirming that the lesion was not a wart.

The lesion was excised and sent for histopathology, following features were seen: well-defined papillated lesion covered by hyperplastic epidermis with mild spongiosis in foci. An increased number of thin-walled dilated capillaries with a sparse mixed inflammatory infiltrate of lymphocytes, neutrophils, and plasma cells were seen on the dermis. Koilocytes were not visible, and therefore, the diagnosis of vulvar vestibular papillomatosis was confirmed [Figure 3]. The patient was reassured about the benign nature of the disease, and stressed that no further treatment was necessary.

Vulvar vestibular papillomatosis is a benign condition that can be regarded as the female equivalent of PPP in male genitals.[1] Vestibular papillomatosis[2] is a condition where a large number of papillae cover the entire surface of labia minora in a symmetric fashion. The dermoscopy of Pearly penile papules (PPP) appears white or pink in a cobblestone or grape-like pattern with each papule containing central dotted or comma-shaped vessels,[3] whereas dermatoscopic features of genital warts morphologic features may vary from a fingerlike to knoblike pattern, and the vascular pattern can be from glomerular to dotted.[4] Unlike warts, however, PPP

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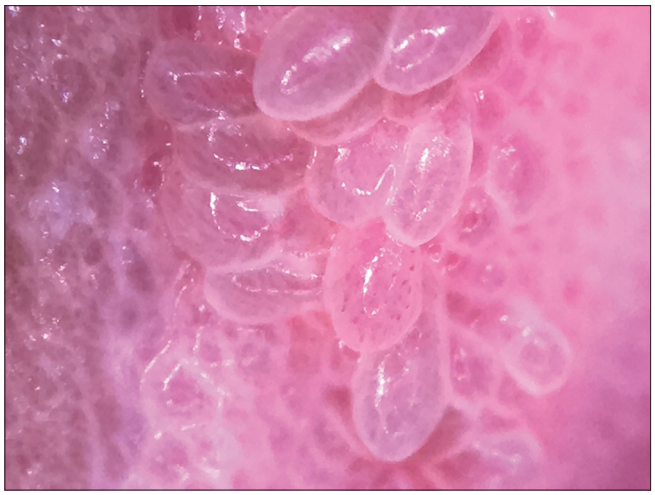

Figure 2: Dermoscopy under polarized light with DermLite™DL200 Hybrid dermoscope (3Gen) confirmed the presence of profuse and irregular vascular channels in the transparent core of the multiple, cylindrical filiform projections. The bases of the individual projections remain separate

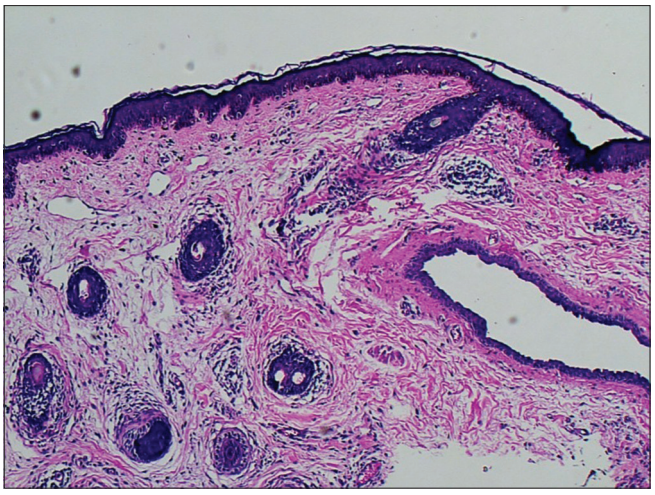

Figure 3: Well-defined papillated lesion covered by hyperplastic epidermis with mild spongiosis in foci. An increased number of thin-walled dilated capillaries with a sparse mixed inflammatory infiltrate comprising of lymphocytes, neutrophils, and plasma cells was seen on the dermis. Koilocytes were absent (H and E with 10×)

does not have desquamation, which is seen as an irregular reflection on dermoscopy.

Papillary projections of the inner labia have been routinely diagnosed as caused by Human Papilloma Virus infection (HPV). Careful identification of clinical parameters of vestibular papillomatosis reveals that they are clusters of pink, soft, uniformly arranged tubular papillae on inner labia, hymen, or periurethral area with round tips and separate bases. However, genital warts are skin-colored or pigmented, randomly arranged, firm, acuminate papules, individual papillary projections fused at the base.[5]

However, there has been a scarcity of literature about this rare entity in Indian dermatological scenario; this is only the fourth case reported after Wollina and Verma,[6] Mehta *et al*.[7] and Kakkar[8] highlighting an apparent disregard for this potentially misdiagnosed entity.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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