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Type-specific HPV infection correlates with risk of recurrence of vulvar intraepithelial neoplasia usual type

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We read this very interesting article by Wakeham *et al.* evaluating the impact of HPV in patients with vulvar neoplasms.[1] The authors observed that the presence of high-risk HPV type(s) in patients affected by vulvar intraepithelial neoplasia (VIN) is associated with an increased risk of developing vulvar carcinoma. The authors observed that all cases of VIN progressed to vulvar cancer are related to HPV16. Moreover, high-risk HPV positivity was demonstrated to be a valid biomarker correlating with better survival outcomes in patients with vulvar squamous cell cancer.[1] Growing evidence suggested that HPV status had a great impact on patients' outcomes.[2,3] However, the role of HPV status in VIN and vulvar cancer is not fully addressed. Recently, our study group investigated how primary (pre-treatment) type-specific HPV influence the risk of persistence/recurrence in patients treated for VIN usual type (also known as VIN2+).[4] In agreement with Wakeham *et al.* we observed that HPV16 is the most common HPV type detected in VIN usual type (detected in 15 out of the 62 patients studied). However, in contrast to the background, we observed that pretreatment infection from HPV31 and HPV33 correlated with an increased risk of VIN usual type persistence/recurrence after primary treatment; while pretreatment infection from HPV16 is not associated with this risk, independently.[4] We speculated that HPV31 and HPV33 might correlate with multifocal and suddenly growing lesions in contrast to more aggressive (and more evident) lesions related to HPV16.[5] However, our investigation is just focused on VIN usual type; while the study from Wakeham *et al.* aimed to test the impact of type-specific HPV infection on patients with both VIN and vulvar cancer.[1] Further studies are warranted in order to assess the risk of VIN, VIN usual type and vulvar cancer outcomes on the basis of type-specific HPV infection. In fact, various type-specific HPV infections might have a different risk of progression and recurrence in vulvar lesions, thus identifying HPV type(s) involved might play an important prognostic and potentially therapeutic role in those patients.

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Letter to the Editor