

Retrospective, registry-based studies have several limitations. NCDB is a clinician-reported database that relies on accurate record keeping and reporting by contributing institutions. NCDB does not report disease-specific survival, which may overestimate the mortality risk from VM.

Vulvar MIS and IVM show worse OS than cutaneous melanoma. Our results confirm that Breslow thickness, lymph node status, and stage are significant predictors of survival. Earlier diagnosis, better health care access, and treatment at academic facilities may help improve OS in patients with VM. Supplemental material is available via Mendeley at <https://data.mendeley.com/datasets/s24y42424b/1>.

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### Human papillomavirus–induced lesions of the anogenital tract among women with vulvar high-grade squamous intraepithelial lesions



*To the Editor:* Human papillomavirus (HPV) lesions can be found at all sites of the anogenital tract, and their multifocal involvement has not been well studied in the published literature.<sup>1-3</sup> Although the link between anal and cervical HPV infection is well known, the link between vulvar high-grade squamous intraepithelial lesions (HSIL) and HPV-induced lesions in adjacent affected sites is not.

The aim of our study was to assess the concomitant presence of HPV-induced lesions of the cervix, vagina, and anus in cases of vulvar HSIL.

This retrospective study included all women with a diagnosis of vulvar HSIL (confirmed by a biopsy specimen) and treated in the dermatologic unit of Cochin Hospital and Hartmann Clinical colposcopy center (January 2004 through December 2015). Sociodemographic, clinical, and histopathologic data were collected from medical files. The number and location of other affected areas (cervix, vagina, and anus) as well as the type of intraepithelial lesion (low- or high-grade) was determined by one doctor

**Table I.** Patient characteristics and sites of squamous intraepithelial lesions

Average age, y (range)	38 (18-73)
Immunosuppressed women,* n (%)	20 (16)
Tobacco use, n (%)	56 (46)
No. of affected sites, n (%)	
1	62 (51)
2	50 (41)
3	9 (7.5)
HPV lesion on another site, n/N (%)	59/121 (49)
HSIL in another site, n/N (%)	42/121 (35)
Other affected sites, n (%)	
Vagina	25/121 (20)
Anus	22/121 (18)
Cervix	22/121 (18)

HPV, Human papillomavirus; HSIL, high-grade squamous intraepithelial lesion.

\*Immunosuppressed women: HIV (n = 14), organ transplant (n = 2; 1 kidney, 1 heart transplant), non-Hodgkin lymphoma (n = 1), systemic lupus under immunosuppressive therapy (n = 2), and CD4 idiopathic lymphopenia (n = 1).

**Table II.** Characteristics between immunocompetent and immunosuppressed women

	Immunocompetent women	Immunosuppressed women*	P value
Patients, n (%)	101 (83.5)	20 (16.5)	
No. of affected sites, n (%)			
1	56 (55)	6 (30)	
2	40 (40)	10 (50)	
3	5 (5)	4 (20)	
Average no. of affected sites	1.5	1.9	.008
HSIL on another site, n/N (%)	31/101 (30)	11/20 (55)	.04

HSIL, High-grade squamous intraepithelial lesion.

\*Immunosuppressed women: HIV (n = 14), organ transplant (n = 2; 1 kidney, 1 heart transplant), non-Hodgkin lymphoma (n = 1), systemic lupus under immunosuppressive therapy (n = 2), and CD4 idiopathic lymphopenia (n = 1).

during a visit after the diagnosis of vulvar HSIL and marked out on a diagram.

One hundred twenty-one patients with HSIL were included, with an average age of 38 years. Twenty patients were immunosuppressed (16.5%). Characteristics of the patients are summarized in Table I. Forty-nine percent of the patients (n = 59) had  $\geq 1$  other HPV-induced SIL at another anogenital site. Among them, 42 (71%) had a high-grade anogenital lesion, corresponding to 35% of all patients. The localizations of the anogenital lesions were the vagina in 20% (25/121), the anus in 18% (22/12), and the cervix in 18% (22/12). HSIL in another site were present in 55% (11/20) of immunocompromised women and in 30% (31/101) of immunocompetent women ( $P = .04$ ). The average number of sites affected by HPV was 1.9 (standard deviation 0.7) in the immunocompromised women and 1.5 (standard deviation 0.6) in the immunocompetent women ( $P = .008$ ). Fifty-six of 121 patients (46%) were current smokers. The average number of sites affected by HPV was 1.75 in the group of smoking women versus 1.45 in the group of nonsmoking women ( $P = .005$ ).

In our study, more than a third of the patients (35%) with vulvar HSIL had HSIL in another anogenital area. Immunosuppressed women and smokers had an elevated risk of HSIL at another site ( $P = .04$  and  $P = .015$ , respectively) and had a greater number of affected sites (Table II). Taking our results into account, it seems important to look for HPV-induced lesions at the other anogenital sites in case of vulvar HSIL, whether women are immunosuppressed or not. Increasing rates of vaccination against HPV may lead to decreased incidence of HSIL not only of the cervix but of the entire anogenital tract.<sup>4,5</sup>

Our study has some limitations. First, analysis was retrospective in nature. Second, there was no genotyping of the HPV lesions. Finally, the CD4 count for the immunosuppressed women and the sexual practices are not included.

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