

New insight in etiology and epidemiology of vulvar cancer





Vulvar Cancer Awareness Day

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No conflicts of interest

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TORINO, ITALY

After this presentation the participant will:

- Recognize risk factors for vulvar cancer
- Provide prevention strategies to reduce the risk for vulvar cancer

Vulvar Cancer

- Worldwide: incidence ~44,200; deaths ~15,200 in 2018
- US: accounts for ~ 3–5% of female genital cancers
 - 4th most common genital cancer after uterine, ovarian, cervical
 - can occur on any part of the vulva but most often affects the clitoris, the inner edges of the labia majora, and the labia minora

Wikipedia 8.14.2019; DermNet.NZ 8.14.2019; Sugiyama VE et al. Obstet Gynecol 2007



Risk factors for vulvar cancer

- vulvar or cervical intraepithelial neoplasia
- history of cervical cancer
- cigarette smoking
- lichen sclerosus
- immunodeficiency syndromes
- northern European ancestry



Madsen BS et al. Int J Cancer 2008; Brinton LA et al. Gynecol Oncol 2017

Vulvar Cancer



- Majority ~75 to 90% of vulval cancers are squamous cell carcinoma (SCC). The next most common type is melanoma and accounts for 2 to 10%. Other rare vulval cancers are basal cell, Bartholin's gland cancer and extramammary Paget disease.
 - (Will therefore focus on SCC)



Wikipedia 8.14.2019; DermNet.NZ 8.14.2019; Sugiyama VE et al. Obstet Gynecol 2007

2 proposed pathways for the development of vulvar squamous cell carcinoma:

- HPV
 - Review of over 2000 specimens found HPV DNA ~87% HSIL/VIN, and 29% cancer (HPV 16 most common)
- Chronic inflammatory (vulvar dystrophy) or autoimmune processes (lichen sclerosus)
 - Differentiated VIN (dVIN) proposed as precursor lesion to cancer

De Koning MN et al. Mod Pathol 2008; Halec G et al Mod Pathol 2017; Weberpals JI et al. Clin Cancer Res 2017; deSanjose S et al. Eur J Cancer 2013



Fig. 1. Vulvar oncogenesis: Schematic representation of HPV-related pathway.



Preti M, et al. Best Practice & Research Clinical Obstetrics and Gynaecology 2014; 24:1052-62



Lee A, et al. JAMA Dermatol 2015;151:1061-7



van de Nieuwenhof et al. Eur J CA 2009;851-56





Thank You!

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