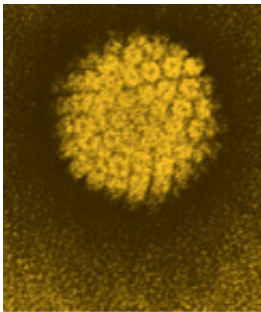


High-risk HPV present in subset of penile carcinomas

August 13 2012



Electron micrograph of HPV. Photo courtesy: U.S. National Institutes of Health.

High-risk human papillomavirus infection is found in a subset of penile squamous cell carcinomas that may develop from undifferentiated penile intraepithelial neoplasia, according to a study published online Aug. 6 in the *Journal of the American Academy of Dermatology*.

(HealthDay) -- High-risk human papillomavirus (hrHPV) infection is found in a subset of penile squamous cell carcinomas (PSCCs) that may develop from undifferentiated penile intraepithelial neoplasia (PeIN), according to a study published online Aug. 6 in the *Journal of the American Academy of Dermatology*.

Carla Ferrándiz-Pulido, M.D., from the Hospital Universitari Vall d'Hebron in Barcelona, Spain, and colleagues examined the prevalence of HPV in a retrospective series of 82 patients with PSCC (69 invasive

and 13 PeIN). Polymerase chain reaction assay with SPF-10 broad-spectrum primers followed by DNA enzyme immunoassay was used for HPV detection, and genotyping was performed using a reverse hybridization line probe assay.

The researchers identified HPV DNA in 31 of 77 (40.2 percent) PSCC cases (22 of 67 invasive and nine of 10 PeIN). HPV-16 was identified in 25 of 31 (80.6 percent) cases. Most basaloid and warty tumors were hrHPV positive, while only 15 percent of usual PSCC were hrHPV positive. All hrHPV-positive PSCC had an adjacent undifferentiated PeIN. The researchers found that hrHPV infection correlated with strong p16^{INK4a} immunostaining, and p16^{INK4a} immunohistochemical overexpression was present in most undifferentiated PeIN. There was better overall survival, although not statistically significant, in both hrHPV-positive and p16^{INK4a}-positive tumors.

"In this study, we detected hrHPV in 28 percent of PSCC and in 90 percent of PeIN," the authors write. "These results allow identification of a subset of PSCC in which HPV would play a triggering role and give support to the bimodal etiopathogenic hypothesis that distinguishes two different subsets of PSCC."

More information: [Abstract](#)
[Full Text \(subscription or payment may be required\)](#)

Copyright © 2012 [HealthDay](#). All rights reserved.

Citation: High-risk HPV present in subset of penile carcinomas (2012, August 13) retrieved 9 April 2024 from
<https://medicalxpress.com/news/2012-08-high-risk-hpv-subset-penile-carcinomas.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private

study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.