

HPV infection highly prevalent among organ transplant recipients

July 12 2011

A new study published in the *American Journal of Transplantation* reveals an association between the human papillomavirus (betaPV) infection and cutaneous squamous cell carcinoma (SCC) in organ transplant recipients.

HPV is known to cause [cervical cancer](#) and SCC in the anogenital area and also plays a role in some forms of head and neck cancer. SCC [skin cancer](#) is increasing in incidence worldwide and the risk is particularly high in immunosuppressed individuals such as organ transplant recipients in whom rates are 100 times those of the general population.

Researchers led by Jan Nico Bouwes Bavinck and Mariet Feltkamp of Leiden University Medical Center, studied a total of 210 organ transplant recipients with previous SCC and 394 controls without skin cancer. They used cutting-edge technologies to assess the presence of 25 betaPV types in plucked eyebrow hairs with simultaneous detection of antibodies to these viruses in blood.

Results show that BetaPV infection is highly prevalent in organ transplant recipients; 94% of patients without skin cancers carried DNA in eyebrow hairs and 97% in those with a history of skin cancer. Furthermore, concordant presence of DNA and antibodies to the same beta HPV type is associated with increased risk for SCC skin cancer.

"Carriage of beta HPV types (a particular skin group of HPV viruses) is extremely common in immunosuppressed individuals," Feltkamp notes.

"Our research findings help to provide a clearer picture of the specific HPV types that may play a part in causing SCC which ultimately may lead to novel preventative or therapeutic interventions."

Provided by Wiley

Citation: HPV infection highly prevalent among organ transplant recipients (2011, July 12)
retrieved 20 December 2022 from
<https://medicalxpress.com/news/2011-07-hpv-infection-highly-prevalent-transplant.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.