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WOMEN WITH HPV AND METABOLIC SYNDROME MAY HAVE NEARLY TRIPLE THE RISK OF DEATH

Women infected with **high-risk HPV strains** who also have metabolic syndrome (MetS) present an almost tripled risk of death from any cause over 10 years compared to women with no conditions.

Data on 5,101 respondents (3,274 women) aged 18 to 65 with a history of HPV infection and MetS were drawn from the U.S. National Health and Nutrition Examination Survey (NHANES) from 2003 to 2016.

MetS has been shown to increase **HPV persistence**, which in turn may increase the risk of cervical cancer or other types of cancer. High-risk strains - HPV 16 and 18 - cause approximately 70% of all cervical cancers.

HPV is the most common sexually transmitted infection (STI) and has been called **the common cold of STIs**, with the body typically clearing the virus rapidly, but high-risk HPV persistence can lead to precancerous changes in the cervix.

The 5,101 participants were classified as follows: HPV absent (1619), low-risk HPV (1138), probable-risk HPV (672), or high-risk HPV (1672;

22% type 16 and 10% type 18). Women aged 18 to 24 represented half of the high-risk HPV group, and a quarter of women with **MetS** had high-risk HPV.

During follow-up, 240 respondents died from any cause excluding HPV-related (no HPV, 46 deaths; low-risk HPV, 60; probable-risk HPV, 37; and high-risk HPV, 97). While HPV status alone was not associated with deaths in fully adjusted models, cross-classification of MetS/HPV showed that women with high-risk HPV and MetS had a 2.6 times higher risk of death from any cause compared to those without MetS/no HPV group.

MetS likely influences the course of HPV infection through a weakened immune response against a background of **chronic inflammation**, with research analyzing direct pathophysiology needed for confirmation.

The authors advocated for adopting a **healthy lifestyle**, routine cancer screening, and HPV vaccination.

Regular screening for cervical cancer alongside HPV vaccination are effective ways to decrease mortality among women.

Adapted after Mary Van Beusekom, MS, 11 March 2024

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