HPV Vaccine Prompts Good Immune Response in Youths With HIV

A recent study analyzed immune responses to the HPV vaccine among HIV-positive youths 7 to 20 years old.

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A recent study found that HIV-positive youths generally mounted a good immune response to the human papillomavirus (HPV) vaccine, Healio reports. However, having a high HIV viral load was associated with a compromised response to the HPV vaccine.

The study analyzed responses to what is known as the quadrivalent HPV vaccine, which protects against four cancer-causing strains of the virus. (The current HPV vaccine, Gardasil, protects against nine strains.)

Roukaya Al Hammoud, MD, an assistant professor at the University of Texas Health Science Center, presented findings from the study at the IDWeek conference in October.

Hammoud and her colleagues studied 56 HIV-positive youths between 7 and 20 years old who received three doses of the HPV vaccine between 2007 and 2017.

They restricted their analysis to the 36 young people from whom at least four plasma samples were collected that bookended each of the three vaccine shots.

Ten of the 36 youths tested positive for some strains of HPV before receiving the vaccine. Compared with those who tested negative, they were more likely to be older (16 versus 12 years old) and Black (90% versus 58%).

Following all three vaccine doses, four of the young people did not mount an immune response to all four strains of HPV targeted by the vaccine. Compared with those who did respond, these young people had higher HIV viral loads.

Twenty-six of the youths had an additional plasma sample taken a median of nearly six years after their third vaccine dose. Of the 19 members of this group who tested negative for all HPV strains at the beginning of the study, all mounted an immune response to at least one strain of that virus. However, six of them had lost their antibodies to some strains of HPV by that point in time. These individuals had higher HIV viral loads compared with those who maintained their HPV antibodies.

To read the Healio article, click here.

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