HPV Vaccine May Protect With Two Doses Instead of Three

May 17, 2013

A trial to determine the effectiveness of the human papillomavirus (HPV) vaccine Gardasil given in two doses instead of the current standard of three suggests that reducing the dosage may be feasible, MedPage Today reports. However, much more research is needed, and there are detractors arguing against such a shift. In a randomized Phase III trial, investigators studied 830 Canadian girls and young women given differing doses of the vaccine between August 2007 and February 2011. In the end, 675 participants provided follow-up samples. The researchers reported their findings in The Journal of the American Medical Association.

Girls between the ages of 9 and 13 were randomized evenly to receive either three doses of Gardasil (261 girls) at 0, 2 and 6 months or two doses at 0 and 6 months (259 girls). In addition, 310 young women ages 16 to 26 received the three-dose schedule. Investigators measured antibody levels at 0, 7, 18, 24 and 36 months.

Among the girls who took two doses of the vaccine, their responses to strains 16 and 18 of HPV one month after their last vaccine dose proved “noninferior,” or as good as, the responses of the young women receiving three doses. However, noninferiority to some HPV genotypes dissipated at the 24- and 36-month assessments when comparing the girls who took two doses with the girls (as opposed to the young women) who took three doses. Consequently, the investigators concluded that more study is needed before recommending a dose reduction as a matter of policy.

To read the MedPage Today story, click here.

To read the JAMA abstract, click here.

To read an accompanying JAMA editorial questioning two-dose vaccines, click here.