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La Vacuna del Papiloma virus Humano: Factores Potenciales en la Efectividad

The Quadrivalent Human Papillomavirus Vaccine: Potential Factors in Effectiveness
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Cervical cancer, caused by human papillomavirus (HPV) infection, is the second most common female cancer in the world, causing over a quarter of a million deaths worldwide every year. The quadrivalent HPV vaccine (Gardasil) has the potential to significantly reduce morbidity and mortality associated with cervical disease. However, a variety of factors affect the vaccine's success, including exposure to HPV prior to vaccination, duration of protection provided by the vaccine, the in vivo interaction between HPV serotypes, and variation in HPV serotype prevalence worldwide. This article describes the pathophysiology of HPV infection, efficacy and safety of the quadrivalent HPV vaccine, factors that may influence the vaccine's effectiveness in reducing cervical cancer rates, and recommendations for maximizing this effectiveness.

The quadrivalent HPV vaccine has the potential to reduce the devastating gynecologic sequelae associated with genital HPV infections, thereby lessening a considerable amount of physical pain, emotional toll, and medical cost. However, although the vaccine has been shown to be highly effective in preventing infection with four serotypes, it is difficult to predict the magnitude of its impact on cervical cancer rates. Vaccine use may change the epidemiology of infection, and other equally oncogenic serotypes could replace the four serotypes targeted by the vaccine. Therefore, continued adherence to Pap smear screening recommendations will be needed to reduce cervical cancer deaths. Universal implementation of HPV vaccination at an early age and careful follow-up monitoring will also be required.