Organised cervical cancer screening

As of early 2018, the efficacy of HPV vaccines in preventing cervical cancer remains hypothetical. Given that invasive cervical carcinoma develops on average 30 years after initial HPV infection, any effect of Gardasil° (a quadrivalent vaccine including HPV 16 and 18) and Cervarix° (a bivalent vaccine against HPV 16 and 18) on the incidence of cervical cancer will not be demonstrated for some years, as these vaccines were introduced in the late 2000s (1).

Adding other highly carcinogenic genotypes to the Gardasil° vaccine already marketed constitutes only a moderate advance at best, because these genotypes are implicated in fewer cancers than HPV 16 and 18 (see pp. 148-150). In fact, the trial data show that vaccinating 10 000 young women with the 9-valent Gardasil 9° rather than Gardasil° appears to prevent only about 15 additional cases of high-grade cervical dysplasia per year during the years following vaccination. As a comparison, the initial evaluation of the quadrivalent vaccine Gardasil° showed that it prevents about 40 cases of high-grade cervical dysplasia per year per 10 000 girls vaccinated (2). However, this indirect comparison only provides a low level of evidence.

In France, vaccination against HPV 16 and 18 was justified by the vaccine's marked effect in preventing viral infection, along with uncertainty over the French health authorities' commitment to establishing organised screening for cervical cancer in the short term (2). About ten years later, organised screening has still not been implemented at the national level, despite announcements that it would be in 2018 (3).

Misgivings about HPV vaccination are common due to concerns over its severe adverse effects. According to the trial described on pp. 148-150, an injection site reaction rated as severe occurred within 5 days after about one in every 40 injections of Gardasil°. They appeared more common with Gardasil 9°: a severe reaction occurred after about one in 20 injections. If Gardasil 9° replaces Gardasil°, it is likely that reluctance over vaccination will increase and that ultimately, even if the vaccine does prevent cervical cancer, its effect will be minimal.

Rather than persuading adolescent girls to undergo a painful vaccination, it is much more useful to focus on a public health measure capable of reducing the morbidity of cervical cancer, i.e. organised screening of adult women. France eventually decided to launch such organised screening in May 2018. Watch this space.

Prescrire

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1- Prescrire Editorial Staff "HPV vaccines: too soon to detect an impact on mortality" *Prescrire Int* 2016; **25** (176): 268.
2- Prescrire Editorial Staff "Human papillomavirus vaccine for genotypes 6, 11, 16 and 18. Cervical cancer prevention: high hopes..." *Prescrire Int* 2007; **16** (89): 91-94.
3- APM International "Le dépistage du cancer du col de l'utérus sera généralisé pour janvier 2018" 2 February 2017: 2 pages.

EDITORIAL