

Editorial comment

Human papillomavirus (HPV) vaccine for Southeast Asian countries

Private hospitals in Thailand are now promoting vaccination with one of the two new human papilloma virus vaccines as a measure to prevent cancer of the cervix and genital warts. These vaccines have been shown to be effective in relatively short-term studies when administered to subjects not yet infected. It is estimated that a large proportion of sexually active males and females worldwide do harbor one or more of the papilloma viruses of which there are at least 100 variants. Thirty of these have been identified as potentially carcinogenic. Types 16 and 18 are, however, found in around 70 % of cervical cancer specimens and consequently are the first target for vaccine production [1].

There are now two inactivated HPV vaccines on the market. One made by Merck Co is quadrivalent and covers HPV types 16, 18, 6 and 11. The latter two variants are largely responsible for genital warts. It is given as 3 intramuscular injections over 6 months. It has been tested for almost 3 years for efficacy in not previously infected females aged 9-26 and was found to provide excellent protection for this length of time. It is now available in Thailand and neighboring countries. A second bivalent vaccine is being made by GlaxoSmith Kline and protects against HPV types 16 and 18. It was tested in a trial of 15-55 year old females over a shorter period of time and found to be safe, immunogenic and effective. It is also given as three injections but is not yet being marketed in this region. It must be noted that neither vaccines are expected to provide protection in previously infected subjects nor reduce chronicity [2-5].

HPV vaccine is rather expensive with prices for the 3 injection series ranging between 120-140 US Dollars for the full series at Bangkok's hospitals. It

is a safe product and may well provide long term protection though this still remains to be proven. It competes economically with other important vaccines that are coming on the market which may be more cost-benefit effective when compared to HPV which is recommended for an age group that is often already sexually active and likely to be infected. Vaccinating pre-pubertal girls (and perhaps also boys) might be a logical next step. It might also be cost-benefit effective if previously infected older subjects could be excluded by an inexpensive rapid test. It is interesting to note that at least one authority recommends that priority for administering HPV vaccine be for girls in the 11-12 year age group.

References

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