ISCCP



E-Newsletter

Newsletter of Indian Society of Colposcopy & Cervical Pathology (Reg.)

Secretariat: Department of Obstetrics & Gynaecology, MAMC & Lok Nayak Hospital, New Delhi 110 002 www.isccp.co.in

Editor's Message

Dear Friends,

Our society is now 7 years old and we have 350 members and growing! The seventh anniversary was a grand affair at Coimbatore, read on for details. Dr Pakhee Agarwal has joined us on the editorial team and has a quiz for you, please email her rightaway at pakh_ag@yahoo.com with your answers.

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Life-Membership & Annual Membership Open

log on to isccp.co.in for registration form & details

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Forthcoming Events

8th Annual Conference of ISCCP at Mumbai

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HPV Vaccine: Myths & Facts

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Popularly known as the Cervical Cancer vaccine, this vaccine has the potential to transform the mortality and morbidity figures of cervical cancer into more favourable outcomes by preventing more than 90% of cases of HPV infection, which is the most common causal agent of cervical cancer. The first vaccine licensed was Gardasil in 2006 which protects against HPV 6,11,16 and 18 while Cervarix which was licensed in 2009 and protects against HPV 16 and 18. Both are given as 3 intramuscular injections over a six month period (0,1,6 or 0,2,6). However, many controversies and myths surrounded the first introduction of this vaccine (in 2006) and still continue to flourish in the mind of the cynic.

This article serves to dispel some of these myths with evidence based facts.

Myth: Young girls are being used as 'guinea pigs' for an unproven vaccine.

Fact: This vaccine has been around for many years and millions of women have been vaccinated across 122 countries the world. It has proven to be safe and effective, with almost 100% women developing protective antibodies against HPV 6,11,16 and 18. These women were protected from precancerous cervical changes caused by these vaccine types.

Myth: The vaccine has caused many deaths.

Fact: No definite causal link between the vaccine and death has been found till date. This data spans over 8 years. Studies have demonstrated similar small numbers of deaths in both the vaccine and placebo (non-vaccine) groups by e.g. road accidents, suicide, or other illnesses.

Myth: The clinical trials did not prove that the vaccine prevented death from cervical cancer.

Fact: The trials could not ethically allow cervical cancer or death to be end points for evaluation. The trials show almost 100% efficacy in the prevention of high grade HPV types 16 and 18 related pre-cancers, which cause 70% of cervical cancers.

Myth: The vaccine only protects against four strains of HPV, so other cancer-causing strains will increase.

Fact: There is no evidence that immunity against the four genital HPV strains in the vaccine is associated with increasing prevalence of other HPV strains. In fact, there is some evidence of cross-protection from other HPV strains as well.

Myth: The vaccine can cause many serious adverse reactions.

Fact: During the vaccine trials, the incidence of adverse events was the same in both vaccine and placebo (saline injections) groups. The aluminium component used in HPV vaccine is the same as that in most non-live vaccines and has an excellent safety record of over 70 years. All vaccines carry a very rare risk of anaphylaxis (1 in 300,000) and that of HPV vaccines is no different. Most (95%) reported side effects are minor and similar to those with other vaccines (fever, mild pain, redness or swelling of injection site).

Myth: Indian girls don't need this vaccine as they are not sexually active before marriage.

Fact: Though there is no formal Indian data, this fact is no longer true. In addition, most girls who become infected with HPV do so within 2-5 years of becoming sexually active, so it is important to vaccinate before sexual debut. This includes any oral or genital contact, sexual intercourse isn't always necessary. Since there are several strains of HPV and the vaccine only protects against specific ones, if a girl is infected with one or more strains before vaccination, the vaccine can't treat them but will help to prevent others.

Myth: The vaccine will promote earlier sexual activity.

Fact: Evidence suggests that HPV vaccination will have no impact on sexual promiscuity, as many factors influence young peoples' decisions about sexual activity including peer pressure, self image and media. It may even serve to make them more conscious about their health and aware of the cervical screening at a younger age.

Myth: There weren't any studies done on girls between 9-15 years and this is the population that is being targeted for vaccination.

Fact: Studies were carried out on females between the ages of 9-26 years. However, for girls between 9-15 years the data collected included only antibody levels in the blood as it was not ethical to do pelvic exams on them, whilst for women between 16-26 years both antibody levels and cervical smears to detect precancerous changes were done. Thus, both the groups were evaluated for immune response to the vaccine and safety. The results showed that both the groups developed significant antibody levels, with the younger cohort developing higher antibody levels. Since the vaccine was almost 100% efficacious in preventing precancerous changes in the older cohort despite lower antibody levels, the research concluded that the vaccine would be equally if not more efficacious in the younger cohort as well.

Myth: Why are men are not being vaccinated?

Fact: In both USA & UK, HPV vaccine is licensed for boys for prevention of genital warts and anal cancer. Although this will help to reduce the virus pool in the population, it is cost effective only if the uptake in the female population is very low.

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Myth: There is rush to use this vaccine, we don't know how long the vaccine protection will last.

Fact: Data suggests that antibody levels are stable for more than at least 8 years with no signs of falling. In addition, antibody levels after vaccination are much higher than after natural infection. Both these indicate long term protection, due to similar immune response to other vaccines. There may be need of booster dose in the future, but that will become clear as longer term data are available.

Myth: Since HPV prevents cervical cancer, Pap smear testing is not needed anymore.

Fact: The vaccine protects against HPV 16, 18 which cause most cases of cervical cancer. However, there are still at least 40 strains of HPV that can infect the cervix. Therefore sexually active women still need a Pap smear at regular intervals to detect precancerous changes caused by other HPV strains.

Myth: We don't need HPV vaccine if Pap smear can detect cervical cancer early.

Fact: Both HPV vaccination and Pap smear are complementary. Whilst the vaccine will prevent precancerous changes, Pap smear will help to detect them early. The vaccine may help to decrease the need for further tests and treatments by preventing cervical cancer.

Myth: The vaccine affects fertility and if given to young girls might make them infertile.

Fact: HPV vaccine does not cause infertility or sterility.

Myth: The vaccine can cause birth defects.

Fact: No specific congenital abnormalities resulting from the vaccine have been demonstrated. In the clinical trials, the pregnancy rates and congenital abnormalities were the same in both vaccinated and placebo (non vaccine) groups.

Myth: The vaccine is very expensive and not cost effective for poor countries.

Fact: On the contrary, these countries need the vaccine more due to higher prevalence of cervical cancer which if can be reduced by vaccination will be worth the investment. It can be cost effective by saving money on testing and treatment of cancers it prevents.

Cervical cancer is the second most common cancer in women between 20-44 years of age. HPV vaccination can serve to reduce the prevalence of cervical cancer in this population.

Further Reading

- Romanowski B. Long term protection against cervical infection with the human papillomavirus: review of currently available vaccines. Human Vaccines 2011; 7(2):161–169
- The Future II Study Group. Quadrivalent vaccine against human papillomavirus to prevent high-grade cervical lesions. New England Journal of Medicine 2007; 356(19):1915–1927.
- Paavonen J, Naud P, Salmerón J, et al. Efficacy of human papillomavirus (HPV)-16/18 AS04-adjuvanted vaccine against cervical infection and precancer caused by oncogenic HPV types (PATRICIA): final analysis of a double-blind, randomised study in young women. Lancet 2009; 374(9686):301–314.
- Centers for Disease Control and Prevention. Recommendations on the use of quadrivalent Human Papillomavirus Vaccine in Males-Advisory Committee on Immunization Practices (ACIP), 2011. MMWR2011; 60(50):1705-1708
- http://www.cdc.gov/vaccinesafety/Vaccines/HPV/hpv_faqs.html
- http://www.vaccineinformation.org/HPV/qandavax.asp

Quiz

This photo shows a colposcopic picture after application of Lugol's iodine.

- 1. What is this appearance called?
- 2. What is it characteristic of?



(Answers in next issue)

ISCCP Activities

VII National conference of the Indian Society of Colposcopy and Cervical Pathology

was held at Coimbatore, Tamilnadu on 16th to 18th March 2012 at sprawling campus of P.S.G.Institute of Medical Sciences & Research, Peelamedu. Coimbatore. The organising team with Dr.Seetha Panicker & Dr Chitra put up a brilliant show with 216 registrations, 4 international and 24 national faculty; the hands-on session, the live workshop conducted by the President elect of the International Federation of Colposcopy and the divine bharatnatyam performance were special attractions.



CME and Workshop on cervical cancer prevention and treatment was organized at Nova Medical Center,

Kailash Colony, New Delhi on 4th 2012 feb (International Cancer Awareness day) by Dr Meena Naik. Live demonstration of Laparoscopic Radical Hysterectomy interactive Colposcopy & Video sessions enthralled the audience.



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