There is a renewed interest in cervical cancer per say, cancer screening and early detection of cervical cancer. This seems to be largely arising out of the advent of HPV Vaccination.

The availability of the vaccine has rekindled the opportunity to discuss more - both for the primary prevention by way of vaccination and secondary prevention by screening and early detection.

The article emphasizes on “prevention better than cure” and focusses on the new information about HPV vaccine against cervical cancer.

FACTS ABOUT CERVICAL CANCER

How common?

Burden of cancer cervix in India is HUGE - out of every four women in the WORLD diagnosed as cancer cervix, one would be an Indian. Because of late diagnosis, Cervical cancer morbidity and death is also common. As compared to 300 deaths per year due to cervical cancer in the West, there are 75,000 women dying out of cervical cancer in India.

What is the HPV - CERVICAL CANCER LINK?

Human Papilloma Virus (HPV) is the causative agent for Carcinoma cervix in 99% cases. Out of the many strains, HPV 16 & 18 (oncogenic) accounts for 70% of the infection. The Virus enters the genital tract by sexual intercourse. Majority of the times, the infection gets cleared by the immune system. The women can get reinfected, and yet again, clear the infection. If the immune system fails to fight and the virus persists in the cervix for periods longer than ten to fifteen years, it leads to precancerous lesion. ......ultimately progressing to advanced cancer.

PREVENTION - Secondary & Primary

Secondary prevention:
where HPV virus has entered, persisted and caused changes
All tests aim to detect precancerous cells in the cervix

Routine screening is recommended in parallel to vaccination as a secondary prevention, vaccination gives protection to the common strains. But many other strains can cause precancerous lesion.
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Routine screening can be done by:
Visual inspection
PAP smear
HPV testing
Suspicious lesions are sent for colposcopic evaluation and biopsy.

Commonest method of screening is by PAP SMEAR

- Recommended schedule for PAP smear.
  - From the age 21 years to age 30 years PAP smear done yearly.
  - From age 30 years to age 45 years once in two years.
  - After 45 years till 70 years, done every 3 years.

**Primary prevention - STOP entry of HPV virus into the cervix. This is done by VACCINATION.**

The vaccine is more effective before the HPV virus enters the genital tract. Hence start immunising well before the girl becomes sexually active.

- Therefore the targetted age group would be between 9 to 26 years.
- Women beyond 26 years up to 45 years should also be offered vaccination. - catch up vaccine
- The risk of new HPV infection would reduce beyond the age of 45 yrs

**TYPES OF VACCINE AVAILABLE:**

Bivalent vaccine – gives protection against HPV 16,18. Cervarix-
Quadrivalent vaccine - gives protection against HPV 16,18, 11 and 13. Gardasil

**Dosage schedule:**
0,1,6 months for Bivalent vaccine.
0,2,6 months for Quadrivalent vaccine.
Vaccine available in a prefilled syringe.
Booster dose – not required.

**ROUTE OF ADMINISTRATION:**
To be given intramuscularly
Post-natal, breastfeeding women are not a contraindication for vaccination.
The time interval between the scheduled dose can be up to 2 years in case the woman gets pregnant.

**PROTECTION / IMMUNITY.**

Lifelong.

**SAFETY** - well established approved by all professional bodies and govt of 100 countries and WHO

Conclusion:
It is thus the primary obligation of every clinician to disseminate the correct information about screening and vaccination for Cancer cervix and prevent needless morbidity and deaths.

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