

## CERVICAL CANCER VACCINE

### Information for Patients Considering Vaccination to protect against Cervical Cancer

The Joint Committee for Vaccination has recently announced its plans for immunising our youngsters with the Cervical Cancer Vaccine. The programme will start in September 2008 and cover 12-13 year old girls in the school setting. A "catch up" programme will extend over the two years into 2011 for girls aged up to 18. The vaccine chosen for this is **Cervarix** made by GSK which protects against cervical cancers caused by HPV viruses 16 and 18.

The Harrow Health Care Centre is pleased to offer both **Gardasil** and **Cervarix**, the new vaccines to protect against cervical cancer. Both provide 100% protection against the two main strains of HPV (human papilloma virus) which cause 70-80% of all cervical cancers. **Gardasil** also protects against the other strains of HPV which cause genital warts.

#### Q. What is HPV?

A. Human Papilloma virus is the infectious agent responsible for 90-100% of genital cancers and at least 90% of genital warts.

#### Q. How is HPV related to cervical cancer?

A. 70% of cervical cancers are caused by two HPV strains Nos. 16 and 18

#### Q. How do I contract HPV?

A. HPV is a sexually transmitted disease which affects up to 1 in 12 people at any one time, i.e. 8% of the population. 40% of 20-24 year olds have detectable HPV.

#### Q. Who gets HPV disease?

A. 80% of women contract HPV at some time in their lives and the majority clear the infection with no adverse effects. The few who have HPV persisting are more at risk of developing cervical cancer.

#### Q. Can I have a blood test for HPV?

A. There is no blood test for HPV, but screening can be done on a cervical smear test to identify individual specified strains. This will show if you have active HPV infection, but it will not show if you are immune to HPV, nor will it identify if this is a transient infection which your own immune system will eliminate on its own.

#### Q. What is the difference between the Gardasil & Cervarix vaccines?

A. Both vaccines protect against strains 16 and 18 which are responsible for 70% of cervical cancers. **Gardasil** has additional protection against the non-cancer causing strains 6 and 11, which are responsible for 90% of genital warts. **Cervarix** contains an adjuvant which it is hoped will give longer lasting immunity and wider cross-protection against other Human Papilloma Virus strains. The antibody responses generated by both vaccines are extremely high and well above that of any natural immunity and the better vaccine will be the one which is shown to have the best sustained immune response over several decades. It is not yet known which of the two vaccines may be the better in this regard.

#### Q. Who should receive the vaccine?

A. Anyone who is sexually active may consider having the Cervical Cancer Vaccine. Peak incidence for HPV infection is between the ages 20-24. The vaccine protects best when given to people before they are sexually active and also when their immune memory is best (peaks at around age 12). This is why the Government has funded vaccination for youngsters. There is, however, value for HPV immunisation for older women, particularly those with limited exposure to HPV i.e. those women who have not been sexually active until later. Undoubtedly the cost effectiveness of immunising older patients is much less, but it may have a value for certain individuals.

#### Q. Should boys be vaccinated too?

A. Undoubtedly if boys were vaccinated against HPV this would reduce the **incidence** of HPV in the population and increase herd immunity. Studies have been done on boys and the vaccine is indeed safe but the end point which is prevention of cervical cancer can obviously not be measured in boys. Oncogenic HPV viruses are also responsible for a large proportion of genital cancers in men and also viral papillomatosis, a rare but invariably fatal condition. Boys will be protected against 90% of strains of HPV causing genital warts if they receive the **Gardasil** vaccine, which protects against both cervical cancer and genital warts.

#### Q. Why did the Department of Health (DH) choose Cervarix

A. Here are a few likely reasons:

- This is a vaccine to protect against cervical cancer. There was real concern that if the public perceive this as a vaccine against a sexually transmitted disease, that the DH would

be facing similar public reaction to that seen over MMR. Acceptance by the public is much more likely if this is perceived as a cancer protection rather than that against a sexually transmitted disease. **Cervarix** protects only against cervical cancer, whereas **Gardasil** offers additional protection against genital warts. The mixed message associated with **Gardasil** could be in danger of being perceived by the public as a protection against a sexually transmitted disease, whereas the message for protection by **Cervarix** is for a cancer protection only.

- GSK may possibly have been able to demonstrate a superior supply guarantee.
- Studies on long term protection issues are ongoing and currently at a six year level. There have been suggestions that the long term immunity associated with **Cervarix** may be slightly better than that of **Gardasil**. The need for further booster immunisations is still a possibility, thus long term immunity is important.

#### **Q. Which vaccine should I choose?**

**A.** Both vaccines are highly effective and safe.

Individuals who have already received one or more doses of either **Cervarix** or **Gardasil** should complete the course with the same vaccine.

As **Gardasil** has a licence for use in boys and has additional protection against the virus causing genital warts, it seems that **Gardasil** is the better vaccine to be used in boys until we have more information about long term immunity. You may wish to discuss which is the better vaccine for you with one of our doctors, in which case we recommend a 15 minute consultation prior to your first immunisation.

Individuals who have already had genital warts or who are known to have had Types 16 and 18 HPV should perhaps choose **Cervarix**, as this may offer greater cross protection.

The choice of vaccine is dependent thereafter on your personal choice as to whether you wish to have additional protection against genital warts, in which case you should be choosing **Gardasil** or whether you wish to be immunised with the vaccine which will be predominantly used in the UK (**Cervarix**).

#### **Q. What if I am already sexually active?**

**A.** Every sexual partner carries the risk of being a carrier for various strains of HPV. The highest risk is in the 20-30 year old age group. Whilst it is sensible to have the immunisation before you become sexually active, if you have not already been immunised, it is also worth having this even if you are already sexually active.

#### **Q. Why can't older women get the vaccine?**

**A.** There is no reason why older women should not receive the vaccine; it is safe and is "licensed" for use in older age groups in other countries, but it is likely to be less effective. There are certain high risk women who should consider being immunised.

#### **Q. With the new immunisation, will we still have to have cervical screening?**

**A.** Yes, it will be necessary to continue with the cervical screening programme for at least another 30-40 years. However, the frequency of screening will be greatly reduced.

#### **Q. How many injections are required?**

**A.** The course consists of 3 injections to be given at zero, 2 and 6 months.

#### **Q. Who should not have the Cervical Cancer Vaccine?**

- Pregnant women
- Anyone with a depressed immune system
- Anyone who is allergic to the vaccine's components
- Anyone who has a fever or is feeling generally unwell on the day of their immunisation

#### **Q. How much does it cost**

**A.** Each dose of vaccine costs £130.00.

#### **Q. How many injections are required?**

**A.** The course consists of 3 injections to be given at zero, 1 (or 2 months) and 6 months.

#### **Q. Can anyone request the vaccine?**

**A.** We are currently providing the vaccine for females age 9-26 (accompanied by a parent up to age 18) and these patients will be administered the vaccine by the Nurse at a cost of **£130.00** per visit.

As we believe that all young people should be protected before they become sexually active and that individuals older than 26 may well also benefit from receiving the vaccine, we will administer the vaccine beyond its current licence to those individuals. A doctor consultation is, in these

circumstances, therefore required at a cost of £110.00 for a 30 minutes consultation. The cost of the first vaccine will be discounted to £110.00 and the second and third injections can be administered by a Nurse at a further cost of £130.00 each.

**Q. How do I proceed?**

**A.** Please contact our Receptionists to make an appointment. You will be asked to read our question and answer information document before proceeding and would ask you to attend 10 minutes before your appointment time.

**Jane Woyka is the Royal College of General Practitioners' representative on the Advisory Committee for Cervical Screening, which reports to the Department of Health. She has been an active member of this Committee for nine years and has attended international meetings and conferences on Human Papilloma virus and Cervical Screening.**

270908