The ABC of genetal warts

by Philip Carabot

Genital warts are amongst the commonest sexually transmitted infections with a lifetime risk of acquisition of 10%. In spite of this there is still widespread misinformation on the subject which causes unnecessary anxiety, (sometimes boarding on the pathological), amongst patients. This is more marked in females who are given the impression that they are sitting, (quite literally in some cases) on a time-bomb regarding the development of cancer. This alarmist misinformation is obtained from friends, the dreaded internet, but also, sometimes, from us health professionals. It is estimated that 50-80% of sexually active men and women will acquire a genital HPV (both high and low risk) in their lives.

This article will attempt to answer patients' most frequently asked questions.

1. What causes genital warts?

Human Papilloma virus (HPV) types 6 and 11(low-oncogenic-risk (LR) types, cause 90% of genital warts. However multiple HPV types are found in 56% of genital warts. In 11% these are the high-risk (HR) types 16 and 18. HR infections usually cause sub-clinical or latent infection.

2. Are genital warts always sexually transmitted?

The short answer is yes, in the majority of cases, and this includes oral sex. There is little evidence for auto-inoculation, although it may occur. There is no evidence of transmission via fomites. Although we do not have enough evidence to help establish the age when vertical transmission can be excluded, sexual abuse must be considered in any child presenting with anogenital warts.

3. Does the virus cause cancer?

The LR HPV types do not cause cancer, with the exception of the exceedingly rare Buschke-Lowenstein tumours. On the other hand the HR HPV types responsible for genital carcinomas do not cause warts. However studies from Scandinavia have shown an increase risk of carcinoma in situ but not of invasive cancer. Therefore women with genital warts can be reassured that they do not need more frequent smear tests.

4. How long does it take for warts to go?

The choice of appropriate treatment at presentation has improved response rate, but all treatment options have significant failure rates, with recurrence rates ranging between 10 and 90%. The choice of therapy depends on the number, type and site of warts, always keeping in mind that no treatment is always an option. Soft warts respond better to pdophyllotoxin while keratinized warts are better treated with physical ablation. Imiquimod may be suitable for both. Small volume warts are best treated with ablative therapy from the outset. Appropriate therapy should clear most warts in three months.

5. Will the virus stay with me for ever?

It is generally accepted that the vast majority of people with HPV do not develop clinically apparent warts but 60% of women with types 6/11 will develop lesions within 2 years of infection. Most people will clear the virus within 18 months of infection, but between 10-20% will not, and remain DNA positive. These are the individuals who are at risk of developing intra-epithelial neoplasia and invasive cancer. Although the HPV DNA viral load does increase from the latent to the sub-clinical to the clinically overt state, the exact infectivity of each state is unclear. The effect of treatment on viral load is also not clear, and there is no evidence as yet that this reduces the risk of transmission, although it is assumed that it probably does. Atopic patients with genital warts have a more protracted clinical course and a greater probability of recurrences.

6. Warts and pregnancy

Genital warts may become first apparent or increase during pregnancy. Vertical transmission in utero is extremely rare but it can be passed during vaginal delivery in between 1:80 and 1:1500. The most important manifestation is juvenile laryngeal paipillomatosis, an important disease with significant morbidity. The option of caesarean section will need to be discussed but it is not generally recommended unless the warts cause vaginal obstruction or in the presence of extensive cervical disease.

7. Do condoms help?

Data are conflicting, but it should be stressed that condoms may protect against HPV acquisition when used consistently and also have a therapeutic effect when both partners are infected, possibly by preventing continued re-exposure to the virus. However protection can never be complete since most HPV disease is sub-clinical and multi-centric. The incubation period (median 3 months) can be much longer thus allowing transmission. Moreover as already mentioned, transmission can still occur from sub-clinical disease.

8. Should I take the HPV vaccine?

The use of the HPV vaccine is an evolving subject with many grey areas. However what is agreed is that is prophylactic and not therapeutic. For ideal use it should be given to girls, and possibly also boys, aged 12-13 years before they start having sex. Giving the vaccine to patients with previous warts could boost type specific antibodies to types 6 and 11and may provide protection against re-infection. However it is unlikely top prevent recurrences since these depend on a host cell mediated response.

9. Should I and my partner do an HPV test?

Routine HPV testing is currently not recommended in view of the transient nature of the majority of infection, and the potential of a HR positive result causing undue anxiety, without any viable treatment to offer. There is not as yet a commercially available HPV DNA test for men.

10. How can I prevent recurrence?

There is limited evidence to suggest one's lifestyle can affect the natural history of HPV disease. Excess alcohol and chronic stress and depression seem to increase the risk of developing warts. The role of smoking remains controversial with conflicting data. However it does appear that women smokers with cervical HPV have an increased chance of developing low-grade SIL than non-smokers.

Finally, common and mundane as genital warts may be, we must always keep in mind they are STIs and are associated with other hidden infections in 28% of cases. It is all too tempting to simply treat and dismiss. Therefore all first-presentation cases must have a full GU screen to exclude all other STIs. In spite of this warts are not a reason for an "urgent" referral and patients can be reassured that there warts will not suddenly multiply if they have to wait a couple of weeks for an appointment.

Aknowledgements

Most facts and figures have been taken from the excellent review paper by P Goon and C Sonnex "Frequently asked questions about genital warts in the genitourinary medicine clinic: an update and review of recent literature". (Sex Transm Inf 2008; 84; 3-7).

Additional material was taken from "HPV-immune response to infection and vaccination" by Margaret Stanley (Infectious Agents and Cancer 2010, 5:19) The treatment section follows the guidelines of the British Association of Sexual Health and HIV (www. bassh.com)