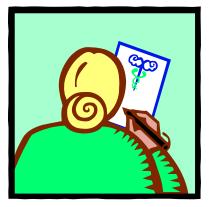
WARTS (VERRUCAE)

Common warts (Verruca vulgaris) are growths in the surface layers of skin caused by the human papilloma virus (HPV). Described as far back as Greek and Roman times, they have been the target of literally thousands of folk remedies and cures. In fact, many of the "modern" methods of wart treatment and removal have their source in old folk medicine.



sometimes unsightly, but little more. However, several of the 50 types of HPV described (specifically, those that infect the genital tract and cause genital warts or "condylomata") are associated with cancers, especially cancer of the cervix. It is reassuring to note that the types of HPV associated with common warts (arms, legs, hands, feet, etc.) have not been linked to cancer. Warts on the sole of the foot (plantar warts) or along the nail bed are often painful and are among the most

For most of us, warts are bothersome and

difficult warts to clear.

HPV is specific to humans and cannot be gotten from or spread to animals. It is spread by contact, and spreads best onto abraded or cut skin. Often warts are seen to spread along a line (seed warts) likely caused by a scratch or a shaving cut.

If left alone, the vast majority of warts in children will spontaneously resolve after a period of months or years, as the active immune system of the child brings the virus under control. However, spontaneous regression is less likely in adults. In general, most adults (and many children) seek treatment for warts, either over the counter or by a healthcare provider. The commonly available treatments include:

- Locally destructive chemicals: Salicylic acid in collodion drops (Compound W, DuoFilm) or incorporated in moleskin pads (Mediplast, Dr. Scholl's Clear Away) can be effective, if occasionally slow. Scarring is rare, and there is little or no pain.
- Blistering/Cold treatments: Liquid Nitrogen (cryotherapy), available at Emory Student Health Services, causes blistering of the wart with a cold "burn." It can be very effective, but often requires repeated treatments (4 is average), usually at 2-week intervals. Pain is mild to moderate, and scarring is usually mild to absent.
- **Surgical treatments**: Resistant warts can be removed by surgery, electrical "burning," or laser. Scarring is common with these methods, pain

can be significant, and local anesthesia by injection is necessary. Recurrence rate is 10-30%.

Occasionally, treatment of warts can cause the HPV to spread, and warts seem to "take off." This is felt to be due to the destruction of the virus-infected cells, with the release and spread of virus particles. In general, if you start treatment, it is best to carry it through to completion, so that you don't end up worse than you started.

Michael J. Huey, MD, 1992, revised 2004

Helpful Links

The American Academy of Family Physicians patient information web site (familydoctor.org), at http://familydoctor.org/x1728.xml.

The American Academy of Dermatology patient information web site at http://www.aad.org/pamphlets/warts.html.

© 2004-06 Emory University, Atlanta, GA