

## **Warts (Verrucae)**

**Dr. Jay T. Hassenfratz**

**Dr. Thomas A. Hassenfratz**

Podiatric Medicine

380 Cleveland Drive

Buffalo, New York 14215

(716) 836-7156

### **What are they?**

- Warts are caused by a virus that has invaded the skin.
- They are part of the Human Papillomavirus family.
- More common in young adults and children.
- A small percentage actually resolve on their own.
- There are many types such as mosaic (large flat warts), vulgaris (domed warts), plantar warts (flat warts).

### **How did I get them?**

Since warts are highly contagious, you may have picked them up from any surface. Pools, showers and locker room floors are the biggest culprits. You can reinfect yourself or spread the virus by wearing the same shoes with the virus still in them.

### **How do I get rid of them?**

Warts are like the unwanted guest that won't leave. They are very difficult to treat and get rid of. Patience is necessary in the treatment of this virus. It may take many months to cure.

My standard treatment is:

- 1) Periodic debridement and application of liquid nitrogen to each lesion. (every 3-4 weeks).
- 2) Dispensing of 3 prescriptions. (Laser formaldehyde roll-on solution, Sal acid, and Aldara).

### **Other Options include:**

- 1) Blistering agents (Monochloroacetic acid or Cantharidin)
- 2) Electrodesiccation- Burning out the lesion.
- 3) Laser (CO2)- Burning out the lesion.
- 4) Excision and suturing- removal of the lesion in surgery.
- 5) Bleomycin Injections. This is a chemotherapy agent that is injected into the wart.
- 6) 5-fluorouracil. This is a DNA synthesis blocker. A cream that is applied to the skin. It can be teratogenic, thus not used if patient is pregnant.
- 7) Cimetidine (Tagamet). Oral Agent used at high doses. Better results in children. Can cause reversible gynecomastia or enlargement of chest tissue. (Dosage: 400mg 3 x per day)
- 8) High doses of Vitamin A and Zinc. (10,000 units of vitamin A and 15mg of Zinc)

### **How do I apply the standard regimen?**

- 1) **Sal acid:** Apply a dime size thickness to the lesion and cover with duct tape.

Best if you apply this at night so that the medication does not spread out to the good skin as well. Expect the skin to turn white and slowly blister. Use a pumice stone daily to remove the white skin as best as you can. You may need to discontinue this application if the skin gets too raw and painful. Allow the area to heal for a few days and resume the application.

- 2) **Laser Formaldehyde roll-on solution:** This is a drying agent. Apply 1 x per day. Discontinue for a day if skin gets too dry. Can be applied anytime throughout the day. Apply to the entire foot.
- 3) **Aldara (Imiquimod):** This is an immune response modifier. FDA approved for genital warts. Currently being used for treatment of lower extremity warts. They come in little packets. Try and get 2 days out of each pack if you can. Apply a small amount to the lesion and cover with duct tape. Do not rub it in, let it absorb on its own.

**Other Helpful hints:**

- Wash shoes that can be washed, in the washing machine 2-3 x per month.
- Use lysol in shoes that cannot be washed and wipe out with a cloth 1 x per week. Allow to dry for 8 hours to avoid contact dermatitis (Skin rash).
- Bleach out the tub after showers or bath to help reduce spread of the virus to yourself or others.
- Use aqua socks when at pool or sandals when in locker room.

Viruses have an incubation period , so even when it appears to be gone, it may still be there but silent, so continue your treatment regimen 1 month after the last wart is gone.

Any other questions ask Dr. Hassenfratz.