A 5-year-old girl with many plantar warts

Commentary by
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What are the treatment options for multiple plantar warts in a child?

Case scenario

I recently saw a 5-year-old girl who has approximately 20 small plantar warts scattered over the sole of one foot. This is too many for local treatment – so what are the alternatives? Also, what is the best treatment for the more usual situation of one or two plantar warts in an adult?

Commentary

There is no easy solution to this problem. With warts, especially in children, I normally spend some time explaining to the patient, or parents, the aetiology and the self-limiting nature of the infection. I think it is essential to determine whom you are treating. Do the warts bother the child, or just the parents? In a weight bearing area (like the sole of the foot) or a cosmetically sensitive area, warts may be a major problem. I usually tell parents that warts are a very stubborn infection and probably do not disappear, whatever is done, until the body's immune system steps in to eradicate them.

I like to prepare the parents for the fact that the treatment process may be time consuming. No treatment may then be seen as an option. Any form of surgical intervention in a weight bearing area is a poor option because of the risk of permanent, painful scarring. I would not normally consider cryotherapy on a child aged under 10 years (and often considerably older).

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Systemic treatment

The only commonly prescribed systemic treatment available is cimetidine (Cimehexal, Magicul, Tagamet). This can be given at a dose of 40 mg/kg/day for up to four months and is well tolerated. If no progress is evident at eight to 10 weeks, I would probably not persist with cimetidine therapy.

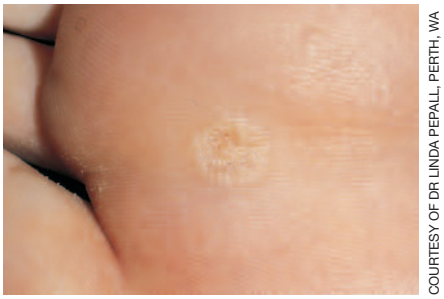
Local treatments

Despite this child's age and the number of warts on her foot, local treatments should be considered. Upton's paste (six parts salicylic acid and one part trichloroacetic acid in two parts glycerol) is useful for more localised areas, but probably not scattered warts. Local daily application of proprietary keratolytics, containing 17% salicylic acid and 17% lactic acid, can be used. The wart areas need to be rubbed back gently with a pumice, preferably after a bath while the skin is soft. The wart paint can be applied with a toothpick or matchstick. If it is practical to do so, the normal skin can be protected with petroleum jelly or nail polish, and a light bandage applied overnight. Use of wart paint needs to be done for up to 12 weeks. Regular follow up for paring and review of technique may be useful.

Immunotherapy

Two other local treatments that are worth considering are imiquimod and diphenylcyclopropenone. Both are a form of immunotherapy.

Imiquimod (Aldara) works by stimulating local production of interferon, which ultimately destroys the wart virus. Results of imiquimod in the treatment of nongenital warts have been variable, probably because the virus is so well protected by the thick, hyperkeratotic skin. Some practitioners have combined imiquimod with salicylic acid to soften the areas and allow better penetration. It is expensive, but the sachets can be used on a number of occasions, with a pin-prick allowing a tiny amount of the cream to be applied to each wart once or twice a day. I would persist for up to four weeks, and then cease if there is no reaction.



COURTESY OF DR LINDA PEPALL, PERTH, WA

A solitary plantar wart.

Diphenylcyclopropenone (diphencyprone, DCP) is a chemical with high allergenicity. The patient is first sensitised to DCP by the application of 2% to the patient's arm, using a Finn chamber (a small, aluminium, hollow cup taped to the skin), for 48 hours. DCP is then applied daily to the warts at a strength of 0.1%, mixed with 15% salicylic acid in white soft paraffin. The resulting local contact dermatitis in turn induces an immune reaction against the warts. This can work very well, but I have seen severe local reactions and occasionally a generalised dermatitis. I would suggest referral to a dermatologist for DCP therapy to be supervised.

Solitary warts in adults

Solitary plantar warts in adults can be treated by any of the above methods, but simple paring until the fresh wart is reached, followed by cryotherapy, can be very effective. You may need to freeze the area for 30 seconds. I would normally repeat this at three-weekly intervals for about four to six treatments. Alternatives include 0.3 mL of intralesional bleomycin at a dose of 1 mg/mL, which requires a local anaesthetic before injection. MT

DECLARATION OF INTEREST: None.