

Wart and Molluscum Management Made Easy

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BAL HARBOUR, FLA. — Warts and molluscum in children are often more troubling to their parents, and it is acceptable to wait for them to resolve on their own, Dr. Anthony J. Mancini said at the annual Masters of Pediatrics meeting sponsored by the University of Miami.

However, warts and molluscum are cosmetically unpleasant and can create social stigma. Some families insist on treatment, said Dr. Mancini, of the pediatrics and dermatology departments at Northwestern University Feinberg School of Medicine and head of pediatric dermatology at Children's Memorial Hospital in Chicago.

When treating warts and molluscum, use the specific reimbursement codes, he said. Use code 17000 for treatment of 1 wart, 17003 for each wart when there are 2-14 warts, and 17004 for more than 15 warts. When treating molluscum, use 17110 for treatment of fewer than 15 lesions, and 17111 for 15 or more lesions.

Warts

Warts occur in nearly 10% of children, Dr. Mancini said.

Skin-to-skin contact from other individuals with warts, or skin contact with public surfaces with moisture (such as locker room floors and showers), are among the most common sources of warts in children. In addition, autoinoculation (spreading the wart virus on one's own skin by scratching, or skin-to-skin contact) is a common way that warts spread.

There are two schools of thought regarding warts. Some doctors say treat them, while others suggest leaving them alone, he said. Much depends on the desires of the patient or, more commonly, the parents.

Arguments for leaving warts alone include the fact that they are generally benign, rarely symptomatic, and usually resolve spontaneously. Also, the most effective treatments can be traumatic for young children.

Arguments for treating warts include the social stigma, especially if the wart is on the face or another obvious location, and the contagious nature of warts, which may cause concern with regard to the child's socializing and playing with friends.

Categories of wart treatment include chemovesicants, cryotherapy, immunotherapy, intralesional injections, laser or ablative therapy, and even hypnosis, as well as homeopathic remedies. "Homeopathic remedies may have as much effect as anything that we can offer medically," Dr. Mancini noted.

Chemovesicants include podophyllin and trichloroacetic acid, which are often tried for anogenital warts. "Salicylic acid is probably one of the most effective treatments for warts," Dr. Mancini said. "But we need to teach parents that they may have to treat the wart for weeks or months." Most over-the-counter (OTC) salicylic acid liquids are the same, and contain about 17% salicylic acid.

Some parents may ask about the use of duct tape for warts. "I think that duct tape is a useful adjunct," Dr. Mancini said.

His strategy is to use duct tape in conjunction with salicylic acid. "I have parents apply the salicylic acid to the wart, let it dry for 30 seconds or so, then occlude with a piece of duct tape overnight and remove it in the morning," he said. This method probably works via a debridement effect, but only if duct tape is used. "Scotch tape and masking tape aren't strong enough." Some researchers have suggested that occlusion with duct tape alone is useful, possibly via an immune mechanism.

Cryotherapy is very effective against warts, but it can be quite painful. "We spray the skin and create a large, hemorrhagic blister, with the hope that when the blister falls off, the wart falls off with it," Dr. Mancini said. "If the patient doesn't develop a blister, the treatment is usually not effective."

Overzealous treatment of warts can result in significant wounds, he cautioned. Cryotherapy is safe when performed by an experienced physician, but it is important not to overfreeze the area.

OTC cryotherapy has been available since 2003, and these products can be effective for small warts, but they are not nearly as effective as liquid nitrogen, he said. These over-the-counter methods utilize dimethyl ether/propane, the same in-

redient found in Histofreeze, but the OTC methods don't reach the same temperature, and thus they are significantly less effective.

Liquid nitrogen is a good choice for older children, such as a 10-year-old with one or two warts who says, "I want these gone."

However, Dr. Mancini has a "no hold" policy regarding cryotherapy. "If we would have to hold the child down to do it, I generally recommend against it."

Patients who do not want cryotherapy may consider oral or topical immunotherapy or injection therapy.

Cimetidine is the most common oral therapy used for warts. "The bottom line is that it is worth a try," Dr. Mancini said. "It does work in some patients; the success rate is probably near 30%." He generally prescribes a relatively high dose, 30-40 mg/kg per day, divided and given twice daily.

Squaric acid, a topical immunotherapy, is a fairly painless wart treatment, and the recurrence rate is fairly low among patients who respond, Dr. Mancini said. Allergic contact dermatitis can occur with this treatment, but it is not usually limiting.

Imiquimod is approved for genital warts with a recommended application frequency of 3 times per week, but it can be effective as an off-label treatment for common warts in children when applied once or twice daily, Dr. Mancini said.

Chemotherapy, in the form of 5% 5-fluorouracil (5-FU), also can be used off-label for warts in children, and is particularly useful for flat warts. Dr. Mancini recommends an application of 5-FU to the wart 3 nights each week, with the caveat that this treatment can result in severe dermatitis.

The injection of fungal antigens into the warts has been shown to be effective in some patients, possibly by inducing a host immune response directed at the human papillomavirus-infected tissue. *Candida* antigen injections have demonstrated some effectiveness, and are injected into 1-3 warts at each of two or three visits. As with other forms of topical or injection

immunotherapy, untreated lesions often resolve on a parallel time frame to the involution of treated lesions.

Finally, laser therapy can be used to treat warts. Laser therapy, which is usually done with a pulsed dye laser, probably works by targeting the blood supply to the wart.

Dr. Mancini generally reserves this mode of therapy as a last resort, and it often requires several treatment sessions.

Molluscum Contagiosum

Mollusca have become more common than warts in many practices, Dr. Mancini noted. The condition is spread by skin-to-skin contact and possibly via fomites. Public swimming pools frequently are cited as a potential source of infection transmission.

Mollusca present as dome-shaped waxy papules, and often occur in conjunction with an associated dermatitis ("molluscum dermatitis"). The spontaneous resolution rate is nearly 100%, he said, although it may take 12-18 months, or longer. Remind parents that when the molluscum lesions suddenly and synchronously turn red, it is a good sign; it usually signals that the host immune response has kicked in, Dr. Mancini noted.

Despite a physician's efforts at reassurance of their self-limiting nature, many families want to treat mollusca. Treatment options have some overlap with those used for warts, and include chemovesicants, curettage, cryotherapy, imiquimod, cidofovir, tretinoin cream (especially for the face), and laser treatments.

Cantharidin, made from the extract of the Chinese blister beetle (*Cantharis vesicatoris*) is clearly the most effective treatment for mollusca in children. When used correctly, it has been demonstrated as safe and effective in the treatment of mollusca.

Dr. Mancini cited a study from his practice in which 90% of 300 molluscum patients cleared after cantharidin treatment, and another 8% improved. "It was very well-tolerated, and about 95% of parents said that they would choose this therapy again for their child."

Cantharidin is not approved by the Food and Drug Administration, but was nominated for inclusion on a list of bulk drug substances that may be used in compounding and applied by the physician in the professional office setting. ■



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DR. MANCINI



Common warts are shown prior to treatment by *Candida* antigen injection therapy.



The warts have resolved following two injections into the lesions.



A host immune response (erythema, edema) is shown in two molluscum contagiosum lesions.