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CASE REPORT

— WARTS —

NOVEL COMPOUNDED
PREPARATION
FOR THE TREATMENT
OF RECALCITRANT
COMMON WARTS



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NOVEL COMPOUNDED PREPARATION FOR THE TREATMENT OF RECALCITRANT COMMON WARTS

— Josh Wilde, PharmD —

SUMMARY: A 15-year-old male with active Crohn's disease receiving immunomodulatory therapy presents with recalcitrant common warts bilaterally of knee regions. Previous treatments involving cryotherapy failed to resolve issue. A compounded preparation containing bupivacaine, cimetidine, deoxy-D-glucose, diclofenac, salicylic acid and urea was applied to the warts daily for five weeks with complete resolution. To date patient continues to be free of any signs or symptoms of recurrent warts.



INTRODUCTION:

Human papillomaviruses (HPVs) infect skin and other epithelial surfaces and are associated with a variety of benign and cancerous lesions. The most common manifestation of HPV is warts (*verruca vulgaris*) and most people experience warts in one form or another at some point in their lives. [1] HPV are responsible for a variety of warts including common warts, plantar warts, flat warts, and genital warts to name a few. These warts may occur singly or in groups and can present in multiple locations simultaneously. Warts most often occur in children and young adults however medical conditions such as atopic dermatitis and immunosuppression may increase risk.

Treatment is not mandatory and spontaneous resolution is likely to occur in most individuals over time. Common reasons for treatment include associated pain, discomfort, impaired function, psychosocial concerns and immunosuppression which is a risk factor for extensive, resistant warts.

Typical treatments include chemical or physical destruction of infected tissue, enhancement of the local immune response and anti-proliferative agents. First line treatment is most commonly topical salicylic acid and cryotherapy with liquid nitrogen. Although commonplace, these therapies have high rates of recurrence and a large Cochrane review have shown little overall benefit for cryotherapy but increased side effects such as pain, blistering, and scarring. [1]

The purpose of this case study is to discuss the management of cutaneous warts with a novel compounded preparation. (Figure 3)

CASE REPORT:

A 15-year-old male was diagnosed with cutaneous warts bilaterally in the knee regions. Other relevant history positive for active Crohn's disease treated with infliximab, an immunosuppressant therapy. Patient has had worsening of cutaneous warts for past several years. Social stigma a major factor as patient feels uncomfortable wearing shorts in public and participating in athletic events.

Cryotherapy performed three times in clinic with no resolution. After each treatment there were noticeably more recalcitrant warts present within the weeks to months following cryotherapy. Patient desired full eradication of warts and pursued alternative treatments due to the lack of efficacy of the cryotherapy.

A preparation of bupivacaine, cimetidine, deoxy-D-glucose, diclofenac, salicylic acid and urea (Figure 3) was compounded into a cream dosage form and applied via Q-tip once daily. Five weeks of therapy led to a complete resolution with only minimal discoloration at sites likely due to residual scar tissue from prior unsuccessful treatments. To date (8 months) patient has been free of any signs or symptoms of recurrence.

Use of infliximab for Crohn's management did not change at any point during or after treatment.

CONCLUSIONS:

Current accepted treatment modalities adapted into primary care settings have not been shown to be all that effective and have high rates of recurrence. This case study provides evidence of a potential new treatment for resistant recalcitrant warts. The compounded preparation uses a variety of products with various mechanisms of action. Bupivacaine and diclofenac are used to reduce sensitization to pain and inflammation. Urea as a keratolytic helps soften the skin and allows better penetration. 2-deoxy-D-glucose (DDG) may inhibit cell growth within the verruca. [2] Cimetidine has been shown to help through inducing different factors of the immune system. [3,4] Salicylic acid acts as a chemical irritant to the affected area and remains a first-line therapy.

Warts can resolve spontaneously and can be left untreated. However, the emotional impact of treatment should not be overlooked. In patients who are immune compromised such as this patient it is important to consider treatment as failure to do so can lead to more extensive and resistant warts. [5]

Our patient was able to achieve complete response after only five weeks of treatment without recurrence of disease. This compounded preparation resolved this particular infection and may then be considered a viable treat-

Bupivacaine	1.0%
Cimetidine	5.0%
Deoxy-D-Glucose	0.3%
Diclofenac.....	3.0%
Salicylic Acid	20%
Urea	10%
Proprietary base	QS

Figure 3 -
Compounded
medication applied
to the skin

Fusion Specialty
Pharmacy Formula
#70622 (Wart4)

ment option for similar patients. From this case we find that the combination of these products provides benefit in the treatment of recalcitrant warts and warrants further research.

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