CASE REPORT

An aberrant reaction to *Candida albicans* antigen used for recalcitrant warts successfully treated with oral prednisone

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**Key words:** immune therapy; papillomavirus.

**INTRODUCTION**

Cutaneous papillomavirus infections are a common cause of morbidity.1,2 Although many treatment regimens for common warts are available, no single form of therapy is the clear method of choice. Immunotherapy with *Candida albicans* antigen injections is an accepted method that can be effective, with few side effects reported. The immunotherapeutic *Candida* antigen (CA), is used intralesionally for the treatment of recalcitrant warts.3-5 *Candida* antigen induces a delayed hypersensitivity reaction in healthy patients such that the cell-mediated immune response enhances the immune system’s identification of the viral infection. Although safe, previous studies report pain, edema, and a purple digit as rare aberrant reactions to such treatment.6,7

**CASE REPORT**

An 11-year-old, 56.3-kg girl with a 5-mm verrucous papule with thrombosed capillaries on the lateral distal right fifth digit presented to the clinic with concerns for wart removal. After unsuccessful treatment with cryotherapy, the patient and her mother were provided education about the immunotherapeutic CA. At the time of the first treatment approximately 2 months after cryotherapy, not only did the patient receive a 0.1-mL of 50 μg/mL CA (LETI Laboratories, Barcelona, Spain) into finger, we also injected 0.1 mL of CA into the ipsilateral volar forearm as a test site.

The patient and family were instructed to obtain a picture of the volar forearm test site 2 days later. At her follow-up appointment 1 month later, the family noted a minimal reaction from the injections (less Fig 1. Photo taken 2 days after the second 0.1-mL injection of CA into the fifth digit. The patient experienced redness, edema, and mild pain.

Abbreviation used:

CA: candida antigen

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Funding sources: None.

Conflicts of interest: None disclosed.

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than 5 mm from the provided digital picture of forearm test site), and the wart was approximately the same size (5 mm). At this visit, the recalcitrant wart was treated with a second injection of 0.1 mL CA. Later that night, the patient was taken to urgent care by her mother with the reported concern of redness, pain, and edema in the digit. The patient was given ibuprofen, 200 mg 3 times a day. One day later the finger worsened with increased swelling and mild pain (Fig 1). Two days after the injection, the patient was seen in the clinic and examined. It was noted that there was no dysesthesias of the tip of the affected finger as would be associated with compartment syndrome. The patient was then started on a tapering dose of oral prednisone: five 10-mg tablets of oral prednisone per day for 3 days, three 10-mg tablets of oral prednisone per day for 3 days, and one 10-mg tablet of oral prednisone per day for 3 days. The patient reported an improvement at the end of the treatment regimen (see text for dosage).

DISCUSSION

Although considered safe, CA antigen is reported to cause exuberant reactions in some cases. Of interest, this reaction might be dose dependent, with less chance of reaction using diluted CA antigen. Neither the original test site nor the first wart injection resulted in significant inflammation. This finding suggests that having a minimal antecedent reaction does not predict a future exuberant one.

We report this case to increase awareness of the possible complications that may arise when using CA antigen in an otherwise healthy patient. Moreover, as no specific treatment (other than surgical incision to the area because of worries about compartment syndrome) was described in original reports of CA reactions, this report indicates that a course of systemic prednisone at 1 mg/kg with rapid taper has efficacy.

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