

# DERMABRASION & CRYOTHERAPY IN THE TREATMENT OF VERRUCOUS NEVUS - A CASE REPORT

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## ABSTRACTS

Verrucous nevus is a difficult condition to treat. Treatment with dermabrasion or cryotherapy is usually associated with recurrences. In this article a case of verrucous nevus successfully treated with dermabrasion & liquid nitrogen cryotherapy is being reported.

## Introduction

Verrucous nevus is cosmetically disabling and therapeutically each lesion presents an individual problem. Various treatment modalities available are laser, cryotherapy, cautery and dermabrasion. A problem in treating verrucous epidermal nevi is their tendency to recur unless much of the underlying dermis is removed or destroyed at the same time as the epidermal component<sup>(1)</sup>. We report a case of verrucous nevus responding to dermabrasion and liquid nitrogen cryotherapy...

## Case report

A 20 year old female presented with multiple verrucous papules & plaques over the back (Fig 1), face, chest & right axilla (Fig 2) since childhood. She gave a history of divorce suit being filed three days following marriage.

Haematoxylin & Eosin stained section of skin showed hyperkeratosis, acanthosis & papillomatosis (Fig 3). There were no features of epidermolytic hyperkeratosis. A clinical diagnosis of verrucous nevus was confirmed by histologic picture.

The lesions were anesthetized using 2% Xylocaine with adrenalin by giving a peripheral



Fig 1 : Verrucous nevus over the back



Fig 2 : Verrucous nevus over the right axilla

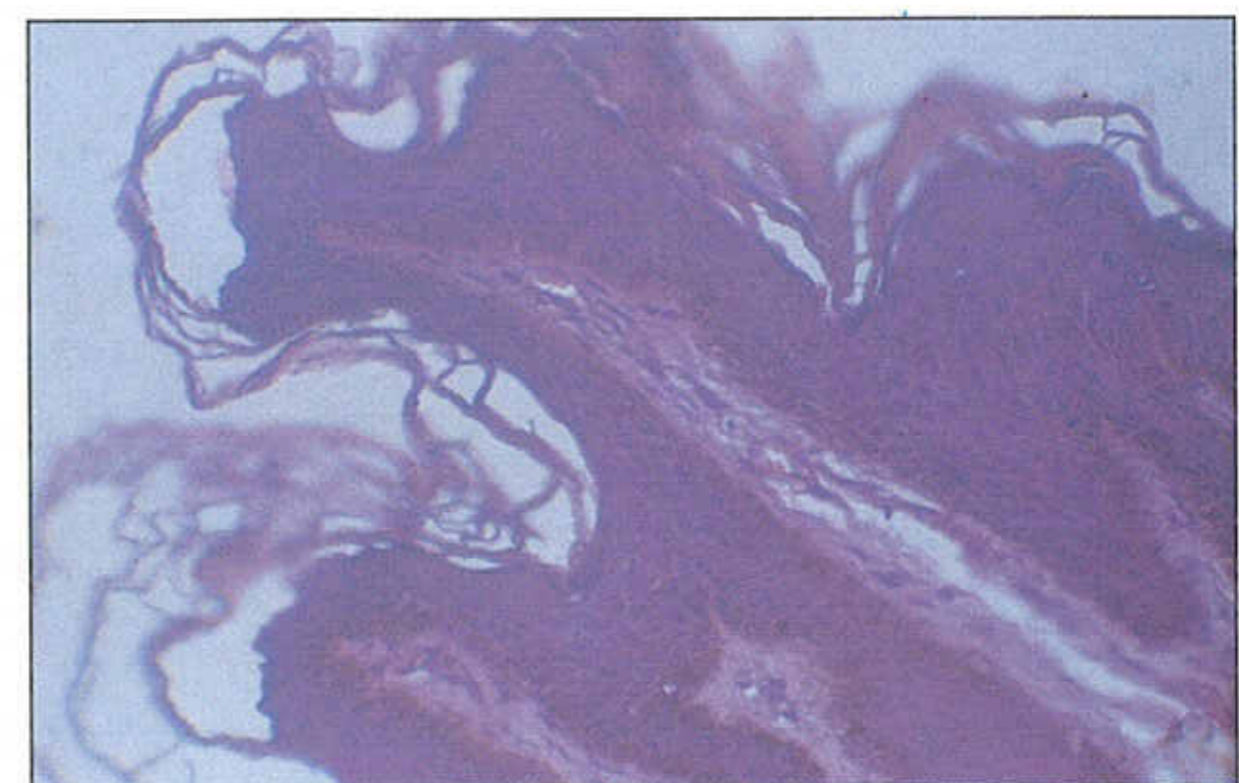


Fig 3 : Section showing hyperkeratosis, acanthosis & papillomatosis. (Haematoxylin & Eosin magnification x 10)

block. One square inch area of the lesion was frozen with liquid nitrogen using a cryocan obtained from Owens Lab, Texas.

This was followed immediately by dermabrasion

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Fig 4 :Dermabraded area



Fig 5 :Area over the back 9 months after dermabrasion showing no recurrences



Fig 6 :Axillary lesions 9 months after liquid nitrogen cryotherapy

with a cylindrical diamond fraize. (Robbins Instruments Inc, Chatham NJ) (Fig 4).

This procedure was performed in 4 sessions over the back, face & chest. The interval between each session was approximately 2 months. Axillary lesions were only frozen with liquid nitrogen on multiple sessions. The patient has responded well and there has no recurrences at the site of dermabrasion since 9 months (Fig 5) and axillary lesions treated with cryoalone has improved considerably (Fig 6).

### Discussion

Verrucous nevus presents a therapeutic challenge especially when it is extensive & cosmetically disabling. Surgical ablation is the treatment of choice<sup>(1)</sup>. Dermabrasion or cryotherapy when used alone is

usually associated with recurrences because of the lack of removal of the dermal component. We combined liquid nitrogen cryo and dermabrasion in the treatment of verrucous nevus. There were no recurrences after 9 months of follow up.

Liquid nitrogen spray just before dermabrasion has got a dual effect. Firstly as a mode of treatment by causing cell necrosis. It also produces initially vasoconstriction of the microvessels and later vasodilatation leading to vascular stasis and tissue anoxia. Secondly it renders the lesions firmer due to ice formation making dermabrasion easier. Dermabrasion removes off the epidermal component of the nevus which would explain the non recurrence of Nevus in our patient.

### References :

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