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Original Research Paper

Dermatology

# ATROPHODERMA VERMICULATUM: A RARE CASE WITH ISOLATED PRESENTATION

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**ABSTRACT** Atrophoderma vermiculata is a rare and benign follicular disorder of the skin occurs due to abnormal keratinisation in follicular pilosebaceous unit. It presents as multiple, symmetric, depressed pitted scars with reticular/ honeycomb atrophy of skin. It usually presents in face but in our case lesions are seen over chest, back, shoulder and gluteal region. The onset is mostly sporadic or sometimes inherited Autosomal Dominant. It is a clinical variant of Keratosis Pilaris Atrophicans. This condition is difficult to treat cosmetically. Hereby we report a rare case of Atrophoderma Vermiculatum with isolated presentation and different site involvement, treated with oral Isotretinoin showing good response.

**KEYWORDS :** Follicular disorder, pits, depressed scars, honeycomb atrophy, sporadic, Keratosis Pilaris Atrophicans, Isotretinoin.

## INTRODUCTION:

Atrophoderma Vermiculatum is a follicular disorder of skin[1][2][3], named after Unna(1894). He initially termed it as Ulerythema acneiforme[4] . It is due to abnormal keratinisation occuring in and around the pilosebaceous follicles. It is mostly sporadic or sometimes shows autosomal dominant inheritance.

## Case Report:

A 40 yr old male presented to Dermatology OPD with complaints of multiple, gradually progressive depressed pitted skin lesions seen over the chest, back, shoulder and gluteal region present since his adolescence. It started as papules then developed to depressed scars. No history suggestive of pain, pruritus, trauma, inflammation, discharge, basal cell carcinoma, acne. No history of allergies / atopy. He is a known diabetic under treatment for 15yrs. Family history is not suggestive of any skin diseases or skin cancer. The examination of skin shows multiple pits, depressed atrophic scars with pigmentation seen over follicles on shoulder[Fig-A], back of trunk[Fig-B], chest[Fig-C] and gluteal region[Fig-D ].The lesions size ranges 1-4mm and depth is about 1-2mm.

Laboratory investigations like blood analysis, renal and liver functions and urinalysis are within normal limits. Histopathology shows epidermal atrophy, follicular hyperkeratosis and perivascular infilterate with edema of dermal collagen. The age of onset, typical clinical features and biopsy findings leads to the diagnosis of Atrophoderma Vermiculatum. The Patient is treated with oral Isotretinoin and it reduced the progression of this disease. Some adverse effects like dryness of skin and lips and mild exfoliations were observed.

Figure-A

Figure-B

Figure-C

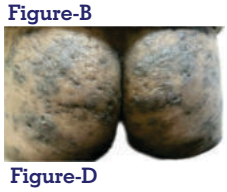

Figure-D

**Multiple pits, depressed scars with atrophy seen over shoulder (Fig-A),back trunk(Fig-B),chest(Fig-C), buttock (Fig-D)**

## DISCUSSION:

Atrophoderma Vermiculatum, aka Folliculitis ulerythematosa reticulata[5],Acne Vermoulante, Folliculitis Atrophicans reticulata or honeycomb atrophy[9] is a rare and benign follicular disorder of the skin. This follicular dermatosis starts in childhood or adolescence. Its onset is sporadic or some cases report as autosomal dominant[1]. The etiology is unknown. The pathogenesis is due to keratinocytes mediated release of Transforming Growth Factor Beta (TGF-B) which causes abnormal keratinisation in follicular pilosebaceous unit. The clinical picture shows multiple depressed scars with reticulate /honeycomb atrophy of follicular plugs. Atrophoderma vermiculatum is one of the variant of Keratosis pilaris Atrophicans as shown in (Table-1)

Table-1 shows, (6) (7)

Keratosis Pilaris Atrophicans – Clinical Variants

1. Atrophoderma Vermiculatum
2. Keratosis Pilaris Atrophicans Faciei
3. Keratosis Follicularis Spinulosa Decalvens

Sometimes associated with many syndromes and other anomalies as listed in Table-2.

Table-2 shows, (7)

- Down's syndrome
- Neurofibromatosis
- Rombo syndrome [Milia, Hypotrichosis, Basal cell carcinoma]
- Bazex syndrome [Hypohidrosis, Basal cell carcinoma]
- Nicolau Balus [Milia ,Syringomas]
- Marfan's syndrome
- Ehler Danlos syndrome

The clinical variants of Keratosis Pilaris Atrophicans are very difficult to manage cosmetically. It leads to both psychological stress and cosmetic inconvenience to patients. It can be treated with topical keratolytics, topical retinoids, Oral isotretinoin[7], Intralesional steroids, CO2 lasers[8], Dermabrasion, collagen implants.

## CONCLUSION:

Thus we report this case of Atrophoderma vermiculatum in an adult with good response seen with isotretinoin treatment. It stopped further progression of this disease.

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