

UV-LIGHT SKIN DAMAGE IN A CYNOMOLGUS MACAQUE (*MACACA FASCICULARIS*)

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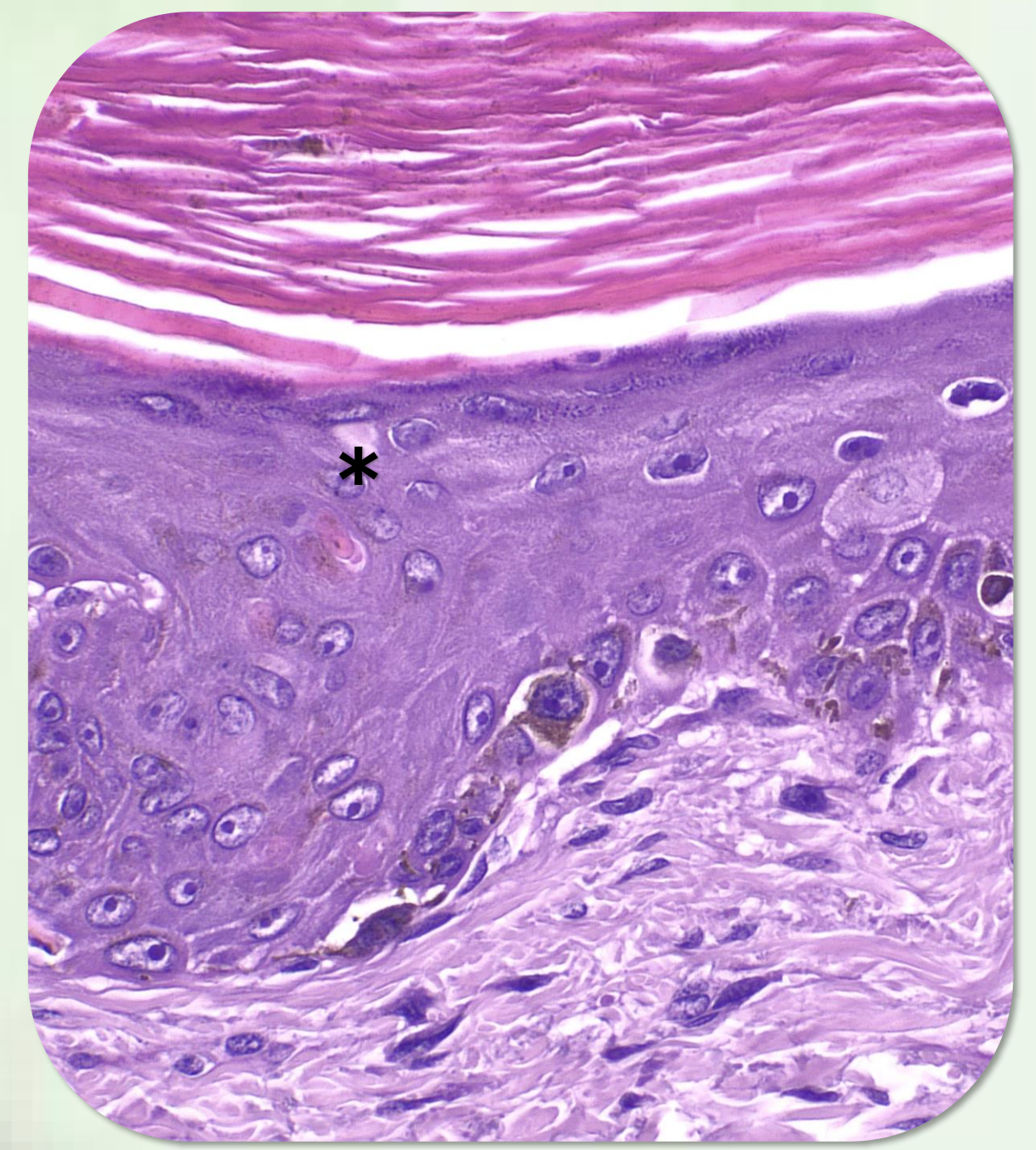
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7-month-history of multifocal alopecic, erythematous and hyperkeratotic plaques on the dorsum with itching.



INTRODUCTION

Chronic exposure to ultraviolet (UV) light causes cutaneous damage with specific histopathological findings, including actinic keratosis and dermatitis. These types of lesions have been widely described in humans and many animals. In the non-human primate group, which lacks a comprehensive literature on dermatological disease, this condition has rarely been reported. We describe a case of chronic UV-light exposure in a cynomolgus macaque (*Macaca fascicularis*).

HISTOLOGY

Epidermis: Hyperplastic epidermis with orthokeratotic hyperkeratosis, stratification disorder with dysplastic keratinocytes, scattered apoptosis (*) and squamotization within the basal layer.

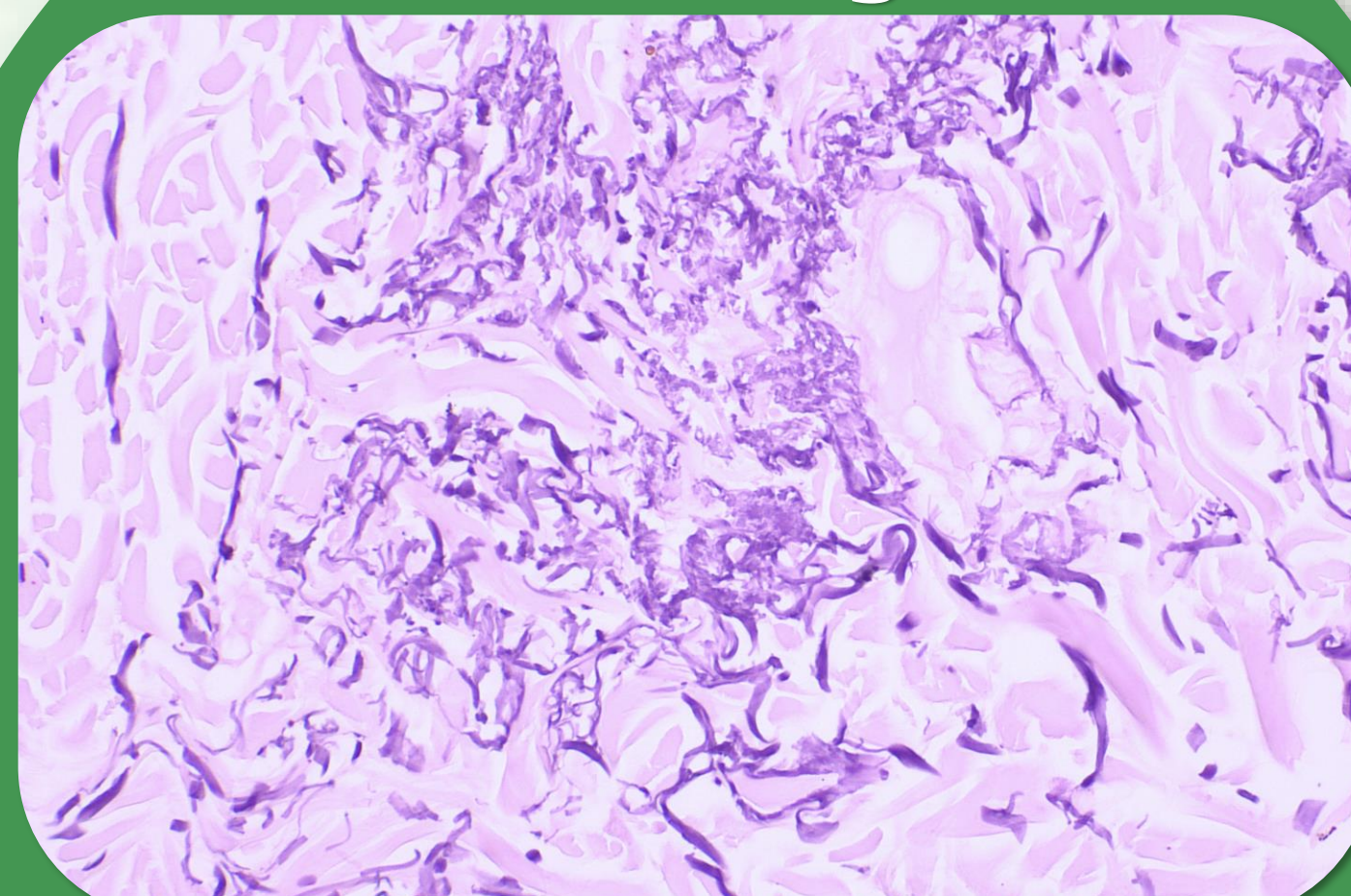
Dermis: laminar fibrosis and multiple areas of deposition of short basophilic fibrils between collagen fibers.

THERAPY

- Systemic therapy with nutritional supplements (retinol and omega-3) and firocoxib without any improvement.
- Topical therapy with aloe gel and sunscreen spray (SPF50) was added.

Lesions were stable. At the same time, two further cynomolgus macaques from the same enclosure developed similar lesions.

Van Gieson Staining



highlighted thickened and fragmented fibrils, which were considered to be elastotic material.

Final diagnosis of actinic keratosis and dermatitis with elastosis

CONCLUSION

To the authors' knowledge this is the first description of UV-light induced skin damage (keratosis and elastosis) in a cynomolgus macaque (*Macaca fascicularis*) which did not respond to systemic therapy.

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