

## Acquired Brachial Cutaneous Dyschromatosis (ABCD): A Case Report And Review of Literature

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### ABSTRACT

Acquired brachial cutaneous dyschromatosis (ABCD) is a rare acquired pigmentary disorder of the skin that affects middle age women. It presents as asymptomatic, reticulated, gray-brown patches with irregular geographical borders which are interspersed with hypopigmented macules involving the dorsal aspects of both forearms.

Herein we report an 58 year old female who is otherwise healthy developed a persistent non-itchy skin lesions over her arms for the last 20 years. Skin examination revealed multiple non-scaly reticulated hyperpigmented patches interspersed with hypopigmented macules on dorsal aspects of both forearms. Skin biopsy showed epidermal atrophy, increased basal layer pigmentation, telangiectasia and solar elastosis. On the basis of the above clinico-pathological findings, a diagnosis of acquired brachial cutaneous dyschromatosis was made. Patient was reassured.

**Keywords:** Dyschromatosis, Poikiloderma, ABCD, Hypopigmented Macules.

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### INTRODUCTION

Acquired brachial cutaneous dyschromatosis (ABCD) is a very rare cutaneous pigmentary disorder. It was first described by Rongioletti and Rebora in 2000.<sup>1</sup> ABCD is characterized by asymptomatic, reticulated, grayish-brownish patches interspersed with hypopigmented macules on the dorsal aspects of forearms. The lesions are usually bilateral.<sup>1-3</sup> It is common in middle-aged Caucasian women. The cause of the disease is unknown. It is thought to be due to the effect of cumulative sun damage. Poikiloderma of Civatte has been found in 45% of cases.<sup>2-4</sup> Treatment of ABCD includes photoprotection, topical depigmenting agents, chemical peels and laser treatment.<sup>1-6</sup>

### CASE PRESENTATION

An 58 year old female presented with 20 years history of persistent slowly progressive itchy skin lesions on her forearms. Past medical history, and review of systems were all unremarkable. There was no similar case in the family. Skin examination revealed multiple non-scaly reticulated hyperpigmented patches interspersed with hypopigmented macules on the dorsal aspects of her forearms (Figure 1). Hair, nails, palms, soles and mucous membrane were normal. Skin biopsy showed epidermal atrophy, increased basal layer pigmentation, telangiectasia and solar elastosis. (Figure 2).

Amyloid stain was negative. On the basis of the above clinico-pathological findings, a diagnosis of acquired brachial cutaneous dyschromatosis was made. Patient was reassured.

### DISCUSSION

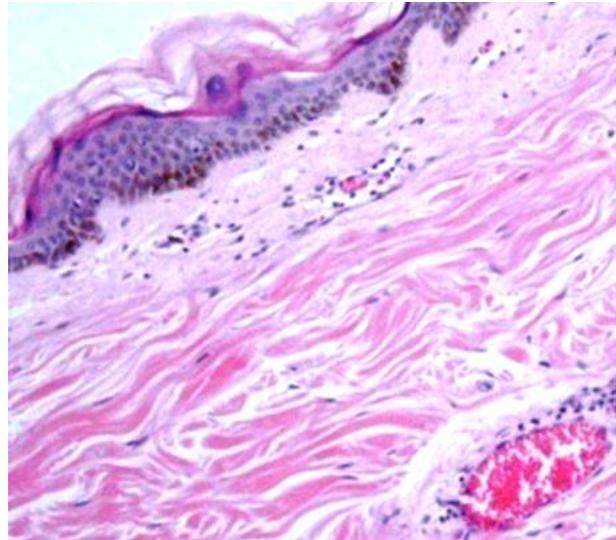
Acquired brachial cutaneous dyschromatosis (ABCD) is an acquired pigmentary disorder of the skin that affects middle age women. Like our patient, ABCD presented with asymptomatic, reticulated, gray-brown patches with irregular geographical borders which are interspersed with hypopigmented macules involving the dorsal aspects of both forearms. The differential diagnosis includes macular amyloidosis, dyschromic amyloidosis, melasma, poikiloderma of civatte, lichen planus pigmentosus, and drug induced hyperpigmentation.<sup>1-3</sup> Amyloid stain was negative in our patient. Dyschromic amyloidosis (DA) starts before puberty. DA is characterised by generalized guttate leukoderma plus reticulated macules of hyperpigmentation primarily in sun-exposed skin. Melasma can rarely affect the extensor aspect of the forearms. However, presence of hypopigmented macules and telangiectasia as well as the classical histopathology of ABCD in our patient confirm the diagnosis of ABCD. lichen planus pigmentosus, in addition to its characteristic histopathology, often involve the temples, neck and

intertriginous areas. Poikiloderma of Civatte is characterized by dyspigmentation, telangiectasias and atrophy. It favors lateral and inferior aspects of anterior neck.<sup>1,4</sup> Some medications can cause pigmentary disorders, these include tetracyclines, antimalarials, amiodarone, and psychotropic drugs. However our patient has no medications history. The underlying pathogenesis of the disease is not very clear. Two hypotheses exist. The first

suggests the role of antihypertensive drugs—with angiotensin-converting enzyme inhibitors (ACEIs) being the most common culprit. The other hypothesis suggests ABCD is a manifestation of chronic sun damage.<sup>1,4</sup> Treatment of ABCD proved to be a challenge, with an emphasis on rigorous sun protection and adjunctive measures with depigmenting agents, chemical peels, and laser treatment.<sup>1-2</sup>



**Figure 1: Reticulated hyperpigmented patches interspersed with hypopigmented macules on the dorsal aspect of the forarms.**



**Figure 2: Skin biopsy showed epidermal atrophy, increased basal layer pigmentation, telangiectasia and solar elastosis**

## CONCLUSION

ABCD is a very rare acquired cutaneous pigmentary disorder that presents as asymptomatic, reticulated, gray-brown patches with irregular geographical borders, which were occasionally interspersed with hypopigmented macules. The histopathology Of ABCD shows epidermal atrophy, increased basal layer pigmentation, telangiectasia and solar elastosis. Since ABCD looks very similar to some pigmentary disorders, the dermatologist should be aware of this entity.

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