

Blue Colored Skin and Atrial Fibrillation: Amiodarone Phototoxicity

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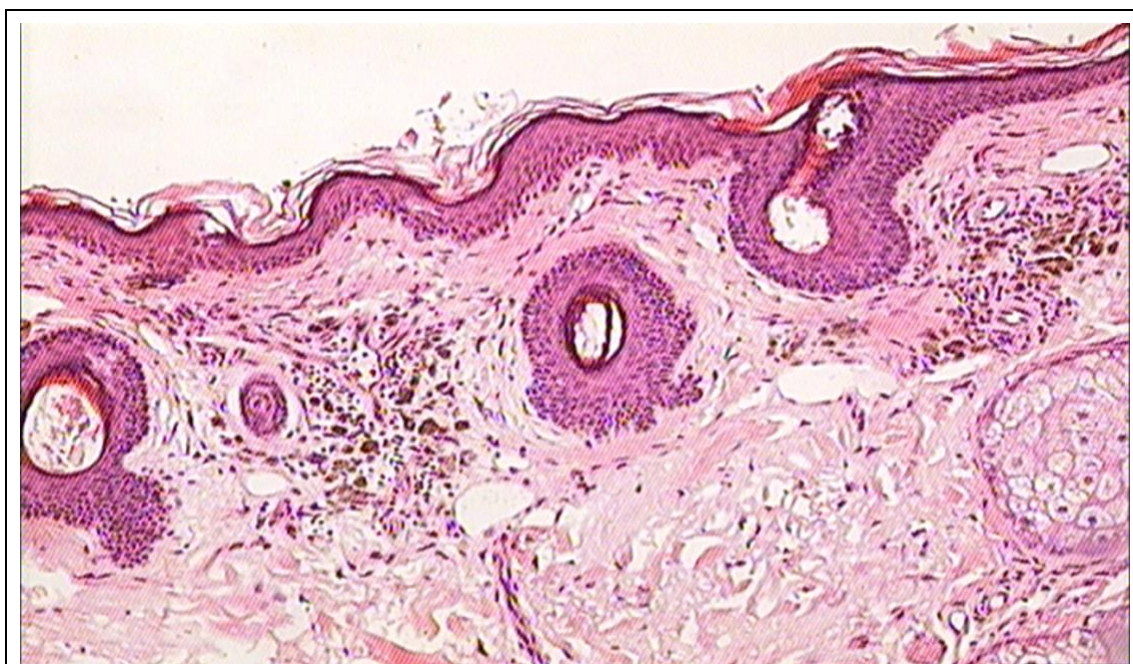


Figure 1A: Epidermis with orthokeratosis, in papillary dermis mononuclear infiltrate with many macrophages containing brown pigment (H&E 10x).

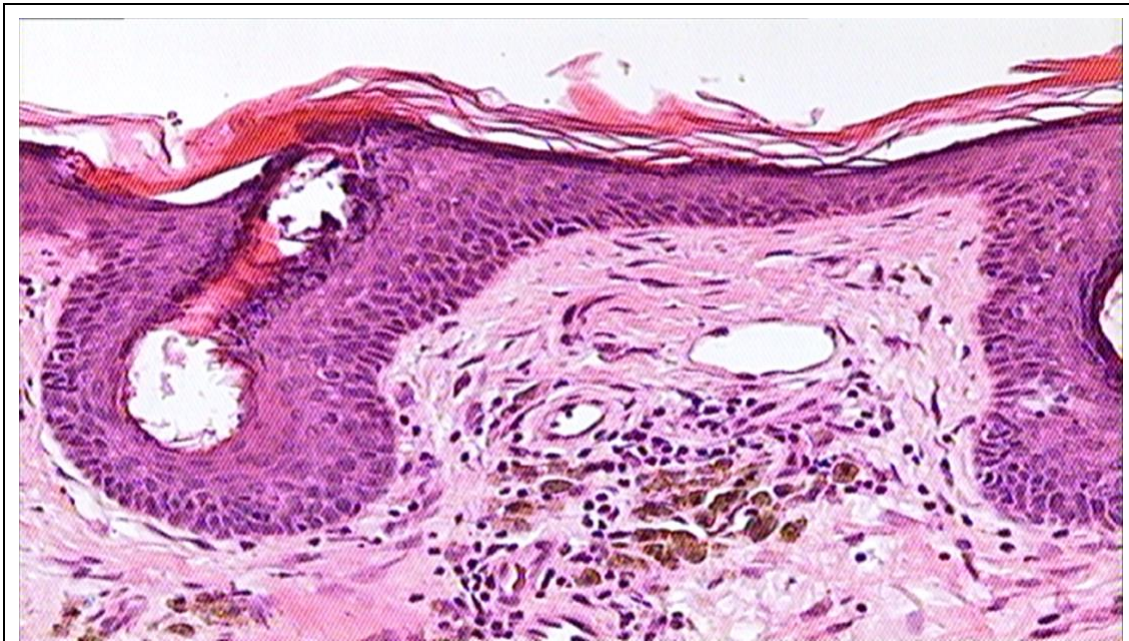


Figure 1B: Epidermis with orthokeratosis, in papillary dermis mononuclear infiltrate many with macrophages containing brown pigment (H&E 20x).

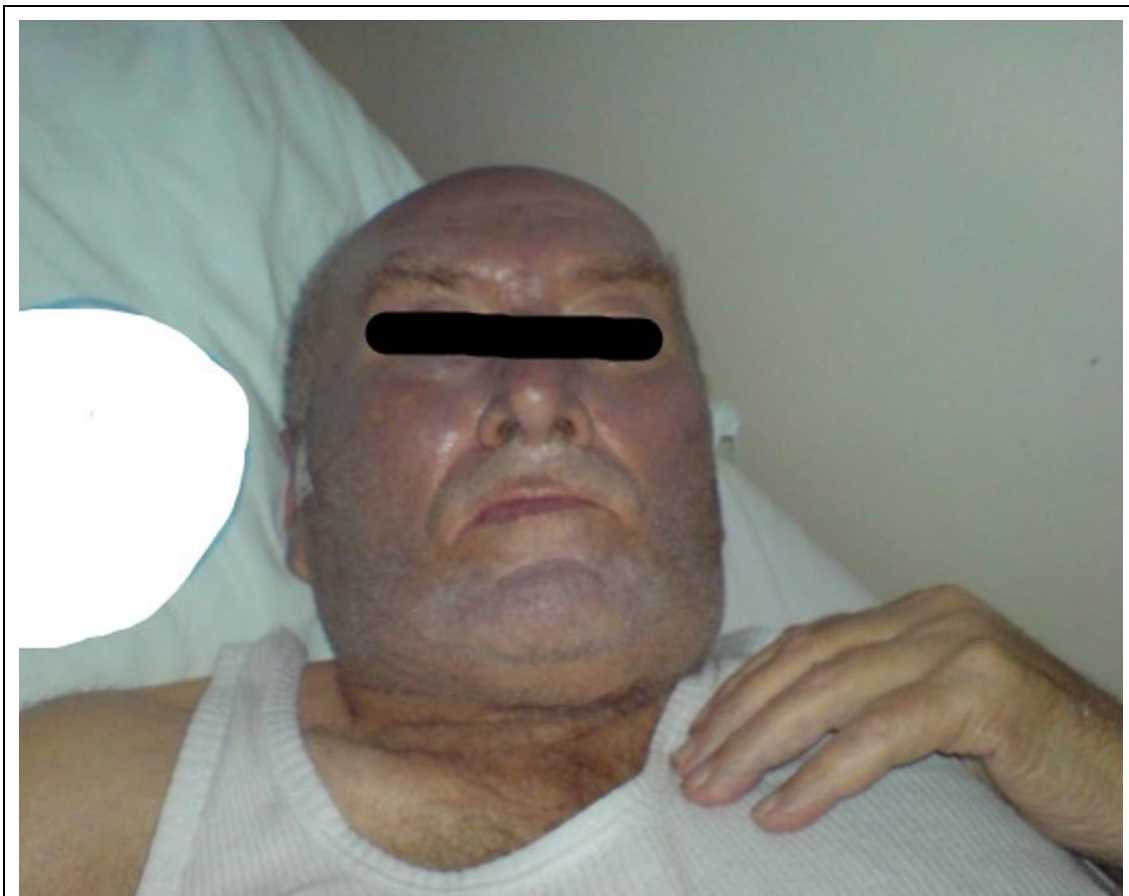


Figure 2: The patient with blue-colored skin during amiodarone therapy.

Clinical Image

A 76-year-old patient was admitted with urosepsis and a medical history of long-term hypertension and coronary artery disease. Amiodarone therapy was initiated two years ago following successful conversion to sinus rhythm from atrial fibrillation.

The clinical presentation was dominated by a blue discoloration of the skin on the cheeks, part of the forehead, and eyelids. Patient's extensive outdoor sun exposure, without protection, in the medical history led us to suspect that the skin's blue discoloration may be an amiodarone therapy side effect. Laboratory testing revealed an erythrocyte sedimentation rate of 50 mm per hour (normal value, <15), a C-reactive protein level of 20.2 mg per liter (normal value, <5.0), and a white-cell count of 20,000 per cubic millimeter with 87% neutrophils (normal value, 4,000-11,000 mm³), urine microscopy: mass white and red blood cells.

A skin biopsy was conducted, and histopathological analysis revealed orthokeratosis in the epidermis, along with a mononuclear infiltrate in the papillary dermis containing numerous macrophages with brown pigment. Instead of amiodarone, a beta-blocker was introduced into the treatment for heart rate control. Six months after discontinuing amiodarone therapy, there was a full recovery in the dermatological condition and also remained in sinus rhythm.

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