Photo Clinic

## A Case with Heart Failure and Skin Discoloration

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## Question

A 60-year-old man with a history of CABG dating back 20 years and an extensive anteroseptal myocardial infarction 4 years ago came to emergency department. His complaints were dyspnea, orthopnea and leg edema. He had experienced 2 episodes of ventricular tachycardia two years ago, where one culminated in cardiac arrest. The patient received Digoxin, Furosomide, long acting nitrate, Amiodarone and spironolactone thereafter. In physical examination, the patient's vital signs was stable, S3 was heard in cardiac auscultation and there were basilar rales in both lungs. Also, a gray-blue discoloration of his cheeks, lips and nose with sparing of nasolabial and other deep skin folds was seen (Figure 1). What is the best diagnosis for this type of skin discoloration?



## Answer

Amiodarone is an antiarrhythmic drug used for various arrhythmias. Although it is a potent

and frequently used drug, it has many side effects. Skin reactions are common with long-term amiodarone therapy. These include photophobia - which can be treated by avoiding sun exposure and the use of sun block - and a bluish-slate gray discoloration of the skin (so-called "blue man syndrome"), which is usually most prominent on the face.

The bluish-slate gray discoloration of the skin occurs in 1 to 3 percent of patients on chronic amiodarone therapy<sup>1</sup> and appears to be due to the deposition of lipofuscin in the dermis.<sup>2,3</sup> There may be a tissue threshold for amiodarone in individual patients above which skin discoloration appears and below which it fades.<sup>4</sup> Thus, patients disturbed by skin pigmentation who are taking large doses (more than 400 mg/day) may notice improvement in skin discoloration by reducing the dose.

There is no specific therapy for the skin discoloration, but affected patients are advised to avoid sun exposure. Complete resolution after cessation of amiodarone therapy may take one year or more.<sup>5</sup>

Amiodarone was discontinued. An ICD was implanted for him. After 8 months of drug discontinuation slight decrease in skin discoloration occurred (figure 2).

Up to now the patient has experienced no episode of ventricular arrhythmias. He is doing well with good functional capacity.



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