A Rare Case of Pacemaker Extrusion Referred for Concern for Squamous Cell Carcinoma

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Introduction

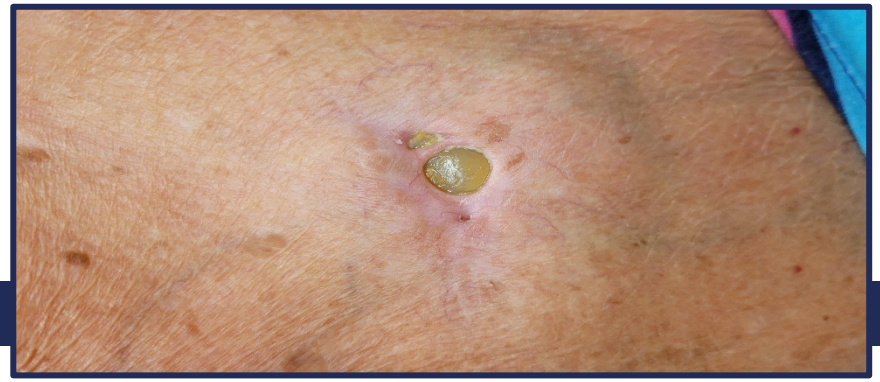
Skin erosion is the most common complication of permanent pacemaker (PPM) placement.[3] Erosion can result from pressure necrosis of the nearby skin and generally presents with evidence of the pacemaker peeking through erythematous skin.[2]

Squamous Cell Carcinomas (SCCs) at or near the site of PPM placement resemble the common skin extrusion and infection complications.[4] It is important to be able to differentiate these common complications from malignant dermatologic conditions.

SCCs typically present as crusting or bleeding wounds that don't heal. They can be scaly, rough papules with raised edges and a central cavitation.[1]

Before Crust Removal:

After Crust Removal:



Case

A 78-year-old woman underwent dual chamber PPM implantation as indicated for symptomatic bradycardia and second-degree atrioventricular block. The procedure was successful, but at her subsequent follow-up appointments, an oozing and crusting scab over the site of PPM implantation was noted. The scab-like growth evolved over the course of 8 months. Her cardiologists suspected SCC, and referred her to Dermatology.

Dermatological evaluation included removal of a shell of serous crust from the top of the lesion. Upon removal, it was clear that the growth was actually a biofilm-covered PPM, rather than a malignant lesion, with an erosion present over the PPM site with gelatinous substance protruding through (see photos). The PPM was palpable underneath and around the gelatinous biofilm.

The patient was treated with a two-week course of Clindamycin HCl (300 mg PO TID) and underwent generator and lead removal and reimplantation of the dual chamber PPM.

Discussion

Pacemaker extrusion is the most common complication of PPM implantation. Though these skin erosions are generally diagnosed by cardiology, it is important for dermatology to be cognizant of the typical presentation in case it appears in clinic.

Malignant skin lesions around PPM implantation sites are rarely reported in the literature. In this case, key findings were revealed when the crust was removed, which emphasizes the importance of removing crusts when evaluating lesions.

To our knowledge, this is the first case of PPM skin extrusion that resembled a malignant lesion. This case emphasizes the importance of recognizing this atypical clinical presentation of pacemaker extrusion to rule out malignancy.

References

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