Reticular Telangiectatic Erythema in a Patient With a Cardioverter Defibrillator

Eritema Reticular Telangiectásico en un Paciente Con Desfibrilador Cardiaco

To the Editor:

The number of cardioverter defibrillators implanted in Spain has increased spectacularly in recent years. In 2004 the rate of implantation was estimated at 49 per million inhabitants.[1] However, there have been few adverse cutaneous reactions reported and while infections are the most common complications, allergic contact dermatitis and reticular telangiectatic erythema (RTE) may also occur. The fact that attempts to find a relation between allergic dermatitis and the components of the defibrillator have been unsuccessful in many cases suggests that other pathogenic mechanisms are involved.

We present a case with characteristics of RTE, but with other findings that have not been described to date. The patient was a 69-year-old man with a history of cardiopathy and ventricular tachycardia (not eligible for ablation) who had a cardioverter defibrillator (Medtronic GEM-DR7271) implanted in the left hemithorax in 2000 and an aorto-aortic graft in 2006 due to the presence of an abdominal aortic aneurysm. In the same year, due to an abnormal decrease in impedance, the defibrillator was replaced with a new one (Medtronic EnTrust D154Atg), which was implanted via sternotomy in the right hemithorax (Figure 1A). Three months later the patient presented a cutaneous lesion in the form of an erythematous plaque 4 cm in diameter, with poorly defined margins and superficial telangiectases, located near the implantation site (Figure 1B). He remained asymptomatic and his general state of health was not affected.

Skin biopsy showed telangiectases in the superficial dermis, with a perivascular lymphohistiocytic infiltrate and mild spongiosis in the epidermis (Figure 2).

The patient underwent patch testing with the standard panel (29 allergens including epoxy resins) of the Spanish Group for Research Into Dermatitis and Skin Allergy and a metal panel (Martí Tor panel of 32 allergens including titanium). The patch tests, read at 48 and 96 hours in accordance with the recommendations of the International Contact Dermatitis Research Group, showed a weak positive reaction to thiomersal and beryllium and were negative for the rest of the allergens.

The lesion remained unchanged for 6 months, and then finally disappeared spontaneously.

Adverse cutaneous reactions following cardioverter defibrillator implantation are relatively uncommon,[2] and

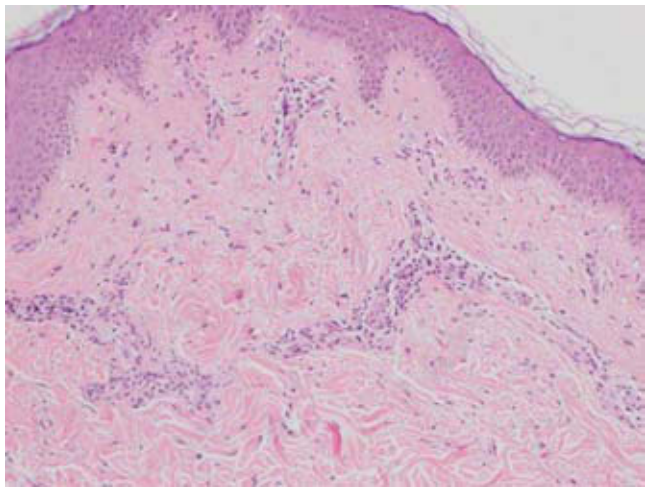

Figure 2 Telangiectases in the superficial dermis, surrounded by a lymphohistiocytic inflammatory infiltrate (hematoxylin-eosin, original magnification ×20).

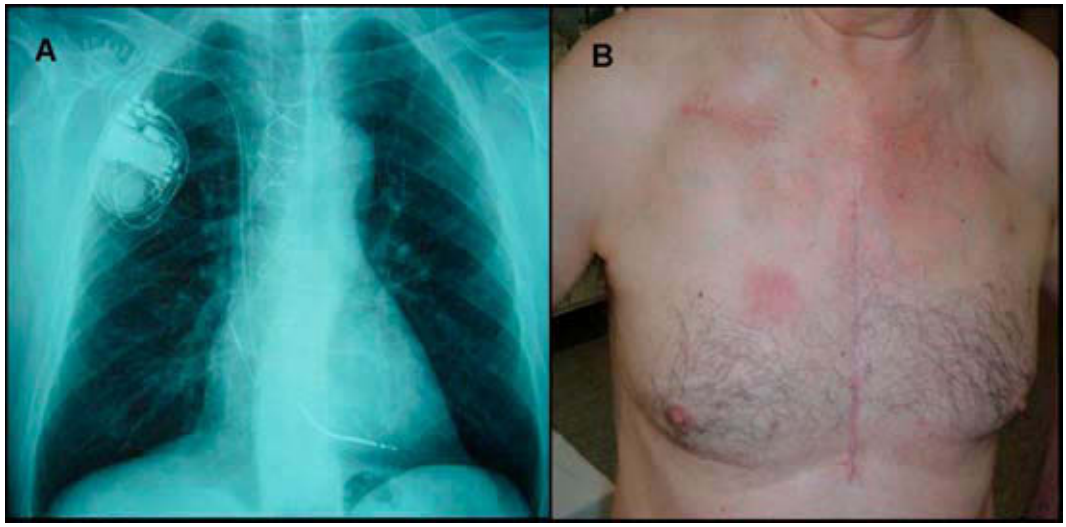

Figure 1 A Location of the defibrillator in the right hemithorax. B Erythematous plaque with telangiectases near the implant site.

include defibrillator pocket infections, extrusion of the implant, and allergic contact dermatitis. Most cases of allergic contact dermatitis are due to the metal and plastic components of the defibrillator, most frequently titanium, epoxy resins, and polyurethane components.[3]

In 1981 Gensch and Schmitt[4] described the first case of RTE. Since then, 22 other cases have been published of allergic contact dermatitis with this cutaneous pattern, characterized by poorly delimited erythematous plaques over the defibrillator implant site[5] and by a histological finding of telangiectases in the superficial dermis.[2,5] In this disorder, patch testing fails to identify any relevant allergen.[6-8] Several possible pathogenic mechanisms have been suggested, including mechanical obstruction of venous flow, formation of electromagnetic fields, and autonomic deregulation.[8-10]

Of particular interest in our case was the location of the plaque, which was not over the implant site, as is most common. To date, only in isolated cases has the lesion appeared near the implant site.[5,8] Moreover, in our patient the lesion disappeared spontaneously a few months after its appearance. While to the naked eye no vesiculation could be observed, histology showed a slight spongiosis, but with other findings consistent with a diagnosis of RTE. The patch tests were positive for beryllium and thiomersal, but according to the technical department of Medtronic, beryllium is not a component of the defibrillator that comes into contact with tissues. We therefore believe that positivity to beryllium was not relevant in the development of our patient's skin condition.

The pathogenesis of RTE remains unknown. Further studies are needed to determine the exact role of various factors in this condition and the possible mechanisms that lead to spontaneous resolution.

References

1. Peinado R, Arenal A, Arribas F, Torrecilla E, Álvarez M, Ormaetxe JM, et al. Registro Español de Desfibrilador Automático Implantable. Primer Informe Oficial del Grupo de Trabajo de Desfibrilador Implantable de la Sociedad Española de Cardiología (años 2002–2004). Rev Esp Cardiol. 2005;58:1435-49.
2. Pitarch G, Mercader P, Torrijos A, Martínez-Menchón T, Fortea JM. Reticular telangiectatic erythema associated with an implantable cardioverter defibrillator. Cutis. 2006;78:329-31.
3. Buchet S, Blanc D, Humbert P, Girardin P, Vigan M, Anguenot T, et al. Pacemaker dermatitis. Contact Dermatitis. 1992;26:46-7.
4. Gensch EG, Schmitt CG. Circumscribed reticular telangiectatic erythema following implantation of a heart pacemaker. Hautarzt. 1981;32:651-4.
5. Dinulos JG, Vath B, Beckmann C, Welch MP, Piepkorn M. Reticular telangiectatic erythema associated with an implantable cardioverter defibrillator. Arch Dermatol. 2001;137:1259-61.
6. Lin YC, Chiu HC, Chu CY, Sun CC. Telangiectatic pacemaker erythema. Clin Exp Dermatol. 2003;28:447-8.
7. Herbst RA. Reticular telangiectatic erythema associated with an implantable cardioverter defibrillator: an underpublished entity? Arch Dermatol. 2003;139:100.
8. Krasagakis K, Vogt R, Tebbe B, Goerdt S. Persistent telangiectatic erythema associated with an automatic implantable cardioverter defibrillator. Br J Dermatol. 1997;136:633–3
9. Chiu M. Is postsurgical sternal erythema synonymous with reticular telangiectatic erythema? J Am Acad Dermatol. 2006;55:180.
10. Mercader-García P, Torrijos A, de La Cuadra Oyanguren J, Vilata-Corell JJ, Fortea-Baixauli JM. Telangiectatic reticular erythema unrelated to cardiac devices. Arch Dermatol. 2005;141:106-7.

R. Rodríguez-Lojo*, M.M. Verea, J. Godoy, and J.M. Barja

Servicio de Dermatología, Hospital Abente y Lago, Complexo Hospitalario Universitario A Coruña (CHUAC), La Coruña, Spain

*Corresponding author.
E-mail address: rodriguezlojo@hotmail.com (R. Rodríguez-Lojo).

Ocular Syphilis: A Rare Presentation of Secondary Syphilis in an Immunocompetent Patient

Sífilis Ocular: Una Presentación Inusual de Sífilis Secundaria en un Paciente Inmunocompetente

To the Editor:

Syphilis is a sexually transmitted disease that can affect a number of organs, including the eye. First described by Ygersheimer in 1918,[1] ocular syphilis is an unusual manifestation of syphilis, which the Spanish medical community needs to be aware of due to the growing number of cases of syphilis in Spain in recent years. This increase in the incidence of syphilis could lead to a rise in the number of cases with atypical presentation or with neurological complications observed in routine practice, as in the case we describe below.[2]

The patient was a 34-year-old white man with no past history of interest who consulted for a 3-month history of blurred vision and loss of visual acuity in both eyes. The symptoms appeared after he returned to Spain from Brazil, where he had lived for a year for work-related reasons. A preliminary eye examination confirmed reduced visual acuity and vitreitis in both eyes. Treatment was initiated with 60 mg/d oral prednisone. A further examination of the fundus 2 weeks later revealed a yellowish placoid lesion in the superior temporal arcade of the left eye (Figure