repeating with the same dose that caused the reaction or returning to the preceding dose.

This protocol was performed prior to the interventional procedure (7 patients) or within 48 hours of revascularization in patients admitted for ST-elevation acute myocardial infarction (6 patients). One patient (with no prior history of drug allergy) developed an urticarial-like reaction after administration of the drug and revascularization, and so the desensitization protocol was followed. Antileukotrienes (24 hours before and 1 hour before) and dexchlorpheniramine (1 hour before) were administered as premedication in the patient with a history of prior anaphylaxis. The protocol, which we applied in the Intensive Cardiology Care Unit but which could equally well have been applied in the hospital ward according to our results, had a successful outcome in all cases, with no reactions or complications of any type. Dose modifications or an increased interval between doses were not required. A daily dose of 100 mg of acetylsalicylic acid was maintained. Likewise, during follow-up, which lasted a median of 27.5 months (interquartile range, 10 to 40 months), no complications were reported.

The patients were to take acetylsalicylic acid daily without interruptions, which might have led to a loss of tolerance after between 2 and 5 days in the case of pseudoallergic reactions and after 24 hours in the case of allergic reactions. To become tolerant once again, a repeat desensitization procedure would have been needed.

Our study applied a single, standard desensitization protocol in patients with a history of skin reactions or anaphylaxis, regardless of whether the mechanism was immunologic. Sensitivity to acetylsalicylic acid is a serious condition. However, whatever the underlying mechanism and clinical manifestation, such sensitivity should not, we believe, rule out use of this drug in patients with ischemic heart disease, whether during the acute phase of the disease or in the prevention of new events, if the benefits are thought to outweigh the potential risks. The rapid desensitization protocol, as practiced in our center in these patients, has shown a good safety and efficacy profile. This allows the protocol to be used for acetylsalicylic acid without short or long-term complications.

Pablo Díez-Villanueva,a,⁎ Rafael Pineda,b Pedro L. Sánchez,a Pilar Tornero,b and Francisco Fernández-Avilésa

aServicio de Cardiología, Hospital General Universitario Gregorio Marañón, Madrid, Spain
bServicio de Alergia, Hospital General Universitario Gregorio Marañón, Madrid, Spain

⁎Corresponding author:
E-mail address: pablo_diez_villanueva@hotmail.com
(P. Díez-Villanueva).

Available online 9 May 2014

REFERENCES


http://dx.doi.org/10.1016/j.rec.2014.01.022
The overall incidence of inappropriate shock deliveries in subcutaneous ICDs varies in different series from 4% \(^1\) to 25%. \(^2\) It has been reported that such shocks can decrease quality of life or increase mortality in these patients. \(^3,4\) Whether such findings also occur with subcutaneous ICDs still has to be proven. In the Weiss et al study, \(^5\) inappropriate shock delivery was comparable to such incidence among intravascular ICDs, but with fewer supraventricular tachycardias and more T-wave oversensing. The use of the conditional zone (rate plus discriminators) also led to fewer inappropriate shocks. \(^5\) In general, it has been reported that T-wave oversensing is the most common cause for inappropriate shocks from subcutaneous ICDs. \(^5\) Aside from T-wave oversensing and supraventricular tachycardias, broad QRS complexes and noncardiac oversensing have been reported as exceptional reasons for inadequate shocks. \(^6\) Interestingly, in the Weiss et al study 3 patients received an inappropriate shock as a result of external noise while working with electrical equipment.

We describe another possible cause of inappropriate shocks secondary to myopotentials oversensing that has not been previously reported. It was very interesting that the external noise was only present when the sensing vectors were using the tip of the cable (alternate and secondary sensing vectors). We postulate that pectoral muscular contractions during clapping produced myopotentials interference specifically in this part of the cable and that it caused the external noise that was interpreted as tachycardia/ventricular fibrillation. It has been emphasized that T-wave oversensing must be avoided during device implantation, using any of the 3 possible sensing vectors. After this finding, we are going to check for myopotentials after repetitive and rhythmic contractions in our patients, even though no prior situation has

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**Figure 1.** Inappropriate shock delivery after tachycardia sensing using the secondary sensing vector. Shock was not aborted, probably because of the repetitive noise. C, charge; electric ray, shock delivery; N, noise; S, sensing; T, tachycardia.
been reported in the literature and this is probably an uncommon cause of inappropriate shock. Since this is a relatively new technology and subcutaneous ICDs programming and follow-up is somewhat different compared to conventional ICDs, we recommend that other clinicians look for myopotentials and choose the vector with fewer artifacts and better T-wave sensing.

Luis Álvarez-Acosta,* Rafael Romero-Garrido, and Julio Hernández-Afonso

Departamento de Arritmología, Hospital Universitario Nuestra Señora de la Candelaria, Santa Cruz de Tenerife, Spain

*Corresponding author: E-mail address: luisalvaco@gmail.com (L. Álvarez-Acosta).

Available online 9 May 2014

REFERENCES


http://dx.doi.org/10.1016/j.rec.2014.02.006

Figure 2. External noise detection while clapping, with the 3 possible sensing vectors of the device. Noise was almost unnoticeable with the primary configuration. On the contrary, it was clearly reproduced with the secondary and alternate sensing vectors.