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RESIDENTS' ROOM

Antibiotic Therapy With Low Doses of Penicillin for the Secondary Prevention of Recurrent Lower Extremity Cellulitis[☆]

RF-Antibioterapia con bajas dosis de penicilina en prevención secundaria de episodios de celulitis de extremidad inferior

I. Pastushenko,^{a,*} A. Martin-Gorgojo^b

^a Servicio de Dermatología, Hospital Clínico Universitario Lozano Blesa, Zaragoza, Spain

^b Servicio de Dermatología, Hospital Clínico Universitario de Valencia, Valencia, Spain



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PALABRAS CLAVE

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Cellulitis is regarded as a common type of inflammation involving the skin and subcutaneous tissue. It is diagnosed in up to 10% of patients seeking emergency dermatologic care in Spain.¹ Most cases are caused by streptococcus bacteria. In the lower limbs, cellulitis can give rise to a

number of complications, such as chronic leg edema (probably secondary to lymphatic damage) or skin ulcers. On rare occasions it can spread deeper and lead to necrotizing fasciitis. Some cases are recurrent and this constitutes a major problem due to the impact on patient morbidity and on health care costs. Guidelines recommend prophylactic antibiotics for recurrent cases, although supporting scientific evidence is limited and not all dermatologists agree with this advice. Of particular interest are 2 double-blind randomized controlled trials evaluating prophylactic treatment with low-dose penicillin (250 mg/12 h), given for 12 months in the Prophylactic Antibiotics for the Treatment of Cellulitis at Home (PATCH) I trial, and for 6 months in the PATCH II trial.

The PATCH II trial included 123 patients recruited in 20 hospitals in the United Kingdom and Ireland. The intervention group comprised 60 patients, who received 250 mg of penicillin twice a day for 6 months. The 63 patients in the control group received a placebo for the same period. Participants were monitored for 3 years. Although repeat episodes were less frequent in the treatment group, the difference was not statistically significant ($P=0.07$).²

The PATCH I trial included 274 patients from 28 hospitals in the United Kingdom and Ireland. The intervention group, comprising 136 patients, received 250 mg of penicillin twice a day for 12 months, and the control group of 138 patients received a placebo for the same period. Patients

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* Corresponding author.

E-mail address: jane.pastushenko@gmail.com (I. Pastushenko).

were monitored for 3 years, with time to first recurrence as the primary outcome measure. During the prophylaxis period (year 1), 22% of patients treated with penicillin had a recurrence, versus 37% of patients who received placebo. This difference was statistically significant ($P=0.01$). The frequency of repeat episodes during the non-intervention follow-up period (years 2 and 3) was similar for both groups (27%). There was no statistically significant difference in the number of patients with adverse events.³

Currently available evidence thus supports the conclusion that prophylactic antibiotic treatment with 250 mg of penicillin twice a day for 12 months after an episode of leg cellulitis is effective, but only during the drug administration period, and that the protective effect begins to fall off as soon as treatment is stopped.

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