Photolocalized purpura during ciprofloxacin therapy

Francisco Urbina¹, Moema Barrios², Emilio Sudy¹

¹Unidad de Dermatología Occidente, and ²Médico Internista, Facultad de Medicina, Universidad de Chile, Chile

Photosensitivity reactions reported with ciprofloxacin mimic those of sunburn, with erythema and edema in the milder forms, and painful blistering with subsequent peeling when severe. Purpuric eruptions during treatment with ciprofloxacin have been rarely reported. We describe a 30-year-old man who was given a 15-day course with ciprofloxacin 500 mg twice a day for a prostatitis. Coinciding with sun exposure, he developed a purpuric, pruriginous eruption on his lower extremities, consisting of erythematous, petechial lesions located on the anterior aspect of his thighs and legs, clearly delimited by his bathing suit. The lesions

iprofloxacin is a usually well-tolerated quinolone antibiotic, with an estimated incidence of skin adverse effects in about 1% of patients, most commonly skin rashes or pruritus, generally mild to moderate in severity (1). Nalidixic acid, the prototype of quinolones, is a well-known photosensitizer and, as it could be expected, other members of this group also posses a similar adverse effect. Photosensitivity reactions have been reported with ciprofloxacin, enoxacin, grepafloxacin, lomefloxacin, norfloxacin, and sparfloxacin (2). However, their sensitizer capacity differs from each other, being observed that lomefloxacin has the highest photosensitizing potential and ciprofloxacin the lowest (3). Clinically, photosensitivity reactions in these cases mimic those of sunburn, with erythema and edema in the milder forms, and painful blistering with subsequent peeling when severe.

To our knowledge, a photosensitivity rash with purpuric lesions in the course of ciprofloxacin therapy has not been reported.

Case report

A 30-year-old man was given a 15-day course with ciprofloxacin 500 mg twice a day for a prostatitis. At the end of treatment and coinciding with sun expo-

cleared completely after the discontinuation of the drug and treatment with topical clobetasol. The acute reaction observed in our patient differed from a classical sunburn, consisting of confluent petechias, strictly limited to sunlight-exposed areas, and accompanied by pruritus. Photoexposed purpuric eruptions should be considered as another side effect of ciprofloxacin therapy in addition to phosensitivity rashes.

Key words: ciprofloxacin; photoallergy; photosensitivity; purpura.

sure, he developed a purpuric, pruriginous eruption in his low extremities. On examination, erythematous, punctiform, isolated, and confluent lesions that did not blanch under diascopy were observed on the anterior aspect of his thighs and legs, clearly delimited by his bathing suit (Fig. 1). Laboratory exams including complete blood cell count, partial thromboplastin time, prothrombin, blood urea nitrogen and complete urinalysis were normal.

The lesions cleared completely after the discontinuation of the drug and treatment with topical clobetasol.

Discussion

Purpuric eruptions during treatment with ciprofloxacin have been rarely reported. Thrombotic thrombocytopenic purpura, prolonged bleeding time, vasculitis (4) with skin and renal involvement, Schönlein–Henoch syndrome, and purpura with localized vasospasm have been described in patients receiving ciprofloxacin, and purpura with acute renal failure during treatment with levofloxacin (5). The acute reaction observed in our patient differs from a classical sunburn, which consists of erythema, occasional blistering and subsequent peeling of the skin; in our



Fig. 1. Purpuric eruption clearly delimited by the bathing suit.

case the eruption was conformed by confluent petechias, strictly limited to sunlight-exposed areas, and accompanied by pruritus.

Photoexposed purpuric eruptions should be considered as another side effect of ciprofloxacin therapy in addition to phosensitivity rashes.

References

- 1. Campoli-Richards DM, Monk JP, Price A, Benfield P, Todd PA, Ward A. Ciprofloxacin. A review of its antibacterial activity, pharmacokinetic properties and therapeutic use. Drugs 1988; **35:** 373–447.
- Ferguson J, Dawe R. Phototoxicity in quinolones: comparison of ciprofloxacin and grepafloxacin. J Antimicrob Chemother 1997; 40 (Suppl. A): 93–98.
- Ferguson J, McEwen J, Al.Ajmi H, Purkins L, Colman PJ, Willavize SA. A comparison of the hotosensitizing potential of trovafloxacin with that of other quinolones in healthy subjects. J Antimicrob Chemother 2000; 45: 503–509.
- Pons R, Escutia B. Vasculitis por ciprofloxacino con afectación cutánea y renal. Nefrología 2001; 21: 209–212.
- 5. Famularo G, De Simone C. Nephrotoxicity and purpura associated with levofloxacin. Ann Pharmacother 2002; **36**: 1380–1382.

Corresponding author: Dr. Francisco Urbina Algeciras 583, Las Condes Santiago Chile e-mail: fcourbina@hotmail.com