Risk factors of cellulitis treatment failure with once-daily intravenous cefazolin plus oral probenecid.

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Abstract

OBJECTIVES:
Once-daily intravenous cefazolin with probenecid is used commonly to treat cellulitis. The primary objective of this study was to determine the risk factors of treatment failure with this regimen.

METHODS:
This was a retrospective cohort study of adult outpatients with cellulitis who were initially treated with once-daily intravenous cefazolin plus probenecid. Treatment failure is defined as inadequate improvement that necessitates either hospital admission or a change in antibiotic therapy to a different intravenous regimen. A stepwise logistic regression analysis was performed to determine the risk factors for regimen failure.

RESULTS:
From January 2003 to December 2008, 159 patients with cellulitis were initially treated with once daily intravenous cefazolin plus probenecid. Thirty-five (22%) patients had treatment failure. The treatment for 53% (9/17) of the patients with a history of chronic venous disease (CVD) failed, whereas the treatment for 18% (26/142) of patients without CVD failed (P = 0.001). Multivariate analysis identified the presence of CVD as the only risk factor associated with treatment failure (odds ratio 4.4, 95% confidence interval 1.5-13; P = .007).

CONCLUSIONS:
Patients with cellulitis and CVD who are being treated with once-daily intravenous cefazolin plus probenecid should be monitored closely for treatment failure.

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