Effects of Enteral Glutamine Supplementation on Reduction of Infection in Adult Patients with Severe Burns

D K Kibor, O E Nyaim, K Wanjeri

Abstract

Objective: To determine the effect of enteral glutamine in reducing the incidence of post burn infections in patients with severe burns.
Design: A double blind randomised clinical trial.
Setting: Burns unit and ward 4D of Kenyatta National Hospital, Kenya
Subjects: Sixty patients with severe burns who were randomised to two arms of treatment: (1) the glutamine group and (2) isonitrogenous arm acting as the control.
Results: Patients' demographic and baseline clinical characteristics were similar in both arms of treatment. For the entire four-week treatment period, the odds ratio of a positive blood culture was almost three-fold higher among patients in the control group compared to those in the Glutamine group ($p = 0.04$). There was also a higher incidence of positive swab cultures from the non glutamine group.
Conclusion: Enteral glutamine supplementation in severely burnt adult patients reduces blood infection by a factor of three. It also significantly reduces the incidence of burn wound infections.