

CIPROFLOXACIN THERAPY IN CHRONIC FOLLICULITIS OF LEGS

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The efficacy of ciprofloxacin was evaluated in 25 patients with chronic folliculitis of legs in a double-blind cross over study. Though ciprofloxacin was found to be far more effective than the placebo the average remission time was only 44.5 days.

Key Words: Ciprofloxacin, Chronic folliculitis of legs

Introduction

Chronic folliculitis of the legs (CFL) has been described mainly in young adult males in India. *Staphylococcus aureus* has been isolated from most of the lesions. Treatment of CFL is frustrating to both physicians and the patients. Various antibiotics has been tried in the treatment of CFL but recurrence of the disease is usually seen.^{1,2} Ciprofloxacin, a fluoroquinolone antimicrobial agent, which is known to be active against a broad spectrum of gram +ve and gram -ve bacteria, was tried in the treatment of this recalcitrant condition.

Materials and Methods

25 clinically diagnosed cases of CFL were studied. Lesions were graded into 3 categories according to the extent of involvement. Aggravating factors, scarring and other associated findings were noted. In vitro culture and sensitivity of the pus from the lesion was done in all cases prior to therapy. Patients at random received either ciprofloxacin twice daily or colour and size-matched placebo twice daily. Both the drugs were coded by Ranbaxy Pharmaceuticals, New Delhi. After one week, if there was no clinical improvement, the drug was discontinued and treatment was continued with the other drug for another 2 weeks. Hence, the patient himself acted as his own control. Clinical

improvement was recorded at the end of 2nd week by grading the lesions. Patients were followed up every 4 weeks till 24 weeks. The drugs were decoded after the completion of the study.

Results

Out of a total of 25 patients, 22 were male and 3 were female. They had a wide range of occupation. 25% were agriculturists and 20% were students. 84% patients had Grade III lesions (more than 10 pustules). Coagulase + ve staphylococci were grown in culture in 88% of the patients.

Placebo was received by 13 patients at random as the first drug. Of these, 2 patients showed complete disappearance of the lesions, while in the remaining 11 there was no clinical improvement. Later 2 patients who failed to show any clinical improvement with ciprofloxacin as the first drug were also given placebo, but no improvement of the disease was seen. Ciprofloxacin was given randomly as the first drug to a total of 12 patients, of which 10 improved. 11 patients who failed to respond to placebo were then given ciprofloxacin following which all improved. Thus out of a total of 23 patients who received ciprofloxacin, 21 patients improved.

Out of the study group of 25 patients, 21 patients (84%) improved with ciprofloxacin, 2 patients (8%) improved with placebo while remaining 2 patients (8%) failed to show any improvement with either ciprofloxacin or

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placebo. The average remission period was 44.5 days with ciprofloxacin, while that of 2 patients improved with placebo was 40 days. There were no untoward side effects with the drugs.

Discussion

Ciprofloxacin is effective by mouth, side effects are few and bacterial resistance is less. The primary target of ciprofloxacin is the bacterial enzyme, DNA gyrase, which is essential for the DNA synthesis.^{3,4}

Though ciprofloxacin was far more effective than placebo ($P < 0.01$) the average remission time was only 44.5 days. There are not many reports regarding efficacy of this drug in CFL, neither there was any proper follow up study to determine the remission period. Ciprofloxacin was found to be effective in skin infections caused by staphylococci.⁵⁻⁷ The improvement noticed in 2 patients with placebo could be attributed to various other factors like alteration of the occupation, use of soaps or psychology of the patient.

Thus, it can be concluded that ciprofloxacin, though effective, cannot be regarded as superior to other conventional antibiotics like erythromycin, cotrimoxazole etc. in bringing a long-lasting remission to this

malady. The gates for an effective management of this frustrating condition CFL are still open.

Acknowledgment

Sincere thanks to Ranbaxy Laboratories for providing the drug and the placebo.

References

1. Desai SC, Shah BH, Mody PJ, et al. Therapy resistant pyogenic folliculitis on legs in adult males with hyper gammaglobulinaemia. *Ind J Dermatol Venereol* 1964; 30: 89-97.
 2. Sugathan P, Zachariah J, Joy MI. Folliculitis cruris pustulosa et atrophicans. *Ind J Dermatol Venereol* 1973; 39: 35-40.
 3. Neu HC. Ciprofloxacin-An overview and prospective appraisal. *Am J Med* 1987;82 (Suppl 4A): 395-404.
 4. Hooper DC, Wolfson JS, NG EY, et al. Mechanism of action of and resistance to ciprofloxacin. *Am J Med* 1987; 82(Suppl 4A):12-20.
 5. James DJ. Therapeutic focus, the fluoroquinolones. *Br J Clin Pract* 1989; 43: 66-7.
 6. Barry AL, Jones RN. In vitro activity of ciprofloxacin against gram - positive cocci. *Am J Med* 1987;82 (Suppl 4A):27-32.
 7. Valainis GT, Pankey GA, Katner HP, et al. Ciprofloxacin in the treatment of bacterial skin infection. *Am J Med* 1987; 82(Suppl 4A): 230-32.
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