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**American College of Physicians**  
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# India Chapter

## **Azithromycin**

– Simplifying Skin Infection Care Without Compromising  
Efficacy

**Clinically Equivalent. Adherence Superior.  
Tolerability Excellent.**

**CASE LBL 2**

## Redefining SSTI Management

Skin and soft tissue infections (SSTIs) are a common cause of outpatient and inpatient visits. Effective treatment must balance microbial coverage, patient adherence, and minimal adverse events. Azithromycin, a macrolide with excellent tissue penetration and long half-life, has shown significant potential as a front-line therapy for uncomplicated SSTIs.

## Clinical Evaluation of Azithromycin in Uncomplicated SSTIs

A randomized, double-blind clinical trial compared the efficacy, bacteriological eradication, adherence, and safety profile of Azithromycin versus Dicloxacillin in adult patients with uncomplicated skin and soft tissue infections.

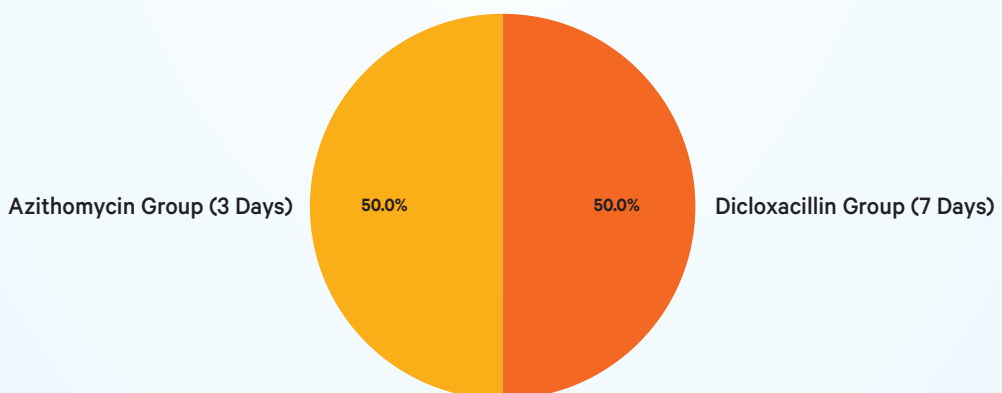
### Study Design and Methodology

Study Population: 62 patients with cellulitis, abscesses, wound infections, and furuncles

Randomized to:

- Azithromycin 500 mg OD for 3 days
- Dicloxacillin 250 mg QID for 7 days

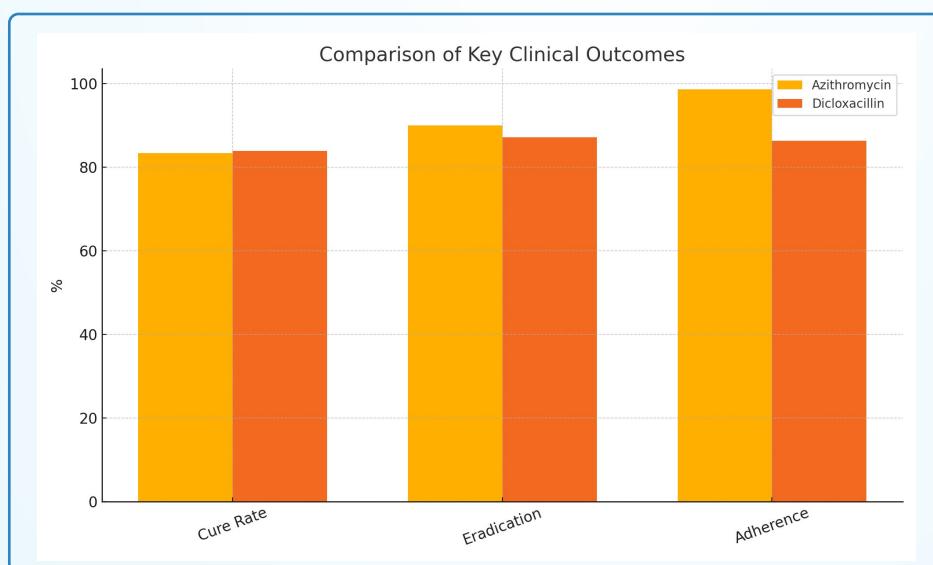
**Patient Distribution Between Groups**



- Double-blind setup, third-party randomization, and ethics committee approval
- Follow-up at Day 1, Day 3–5, and Day 8–10
- Primary endpoints: Clinical cure, bacteriological eradication, and adherence
- Tools used: MicroScan system, Kirby-Bauer disc diffusion, microdilution

Parameter	Azithromycin (3 Days)	Dicloxacillin (7 Days)
Clinical Cure Rate (%)	83.3%	83.9%
Bacteriological Eradication (%)	90%	87.1%
Patient Adherence (%)	98.65%	86.3%
Adverse Events (GI-related)	Mild (Low withdrawal)	Mild (Some withdrawals)
Treatment Duration (Days)	3	7

## Observations & Outcomes



Azithromycin's once-daily 3-day regimen not only provides a comparable clinical and bacteriological outcome to the 7-day Dicloxacillin course but also enhances adherence. Fewer doses translate into better patient compliance, minimized resistance risk, and improved real-world outcomes.

## Key Clinical Insights & References

- Azithromycin 500 mg OD for 3 days provides non-inferior efficacy for uSSTIs
- Offers superior patient adherence due to short duration and fewer daily doses.
- Safety profile is favorable with fewer dropouts from side effects
- Especially for outpatient care with high success rates in cellulitis, abscesses, and furuncles.
- Practical and economical alternative to multi-dose therapies.

### Study Reference

Amaya-Tapia G, et al. 'Once-daily Azithromycin in the Treatment of Adult Skin and Skin-Structure Infections.' J Antimicrob Chemother. 1993; 31(Suppl. E):129-135

## Key Clinical Insights & References

- Retsema J, et al. J Antimicrob Chemother. 1990; 25(Suppl A):83-89.
- Shepard R, Falkner F. J Antimicrob Chemother. 1990; 25(Suppl A):73-82.
- Zhanel GG, et al. Clin Pharmacokinet. 1999; 37(3):215-230.
- Girard AE, et al. Eur J Clin Microbiol Infect Dis. 1990; 9(3):123-128.