

OPTIMIZATION OF ADALIMUMAB IN CHILDREN WITH INFLAMMATORY BOWEL DISEASE: KEY FACTORS FOR DOSE ESCALATION

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Background and Importance

Inflammatory bowel disease (IBD) in **children** presents significant challenges due to **limited therapeutic options**. Optimizing treatments like adalimumab is crucial to improve outcomes. Early identification of patients who may require dose adjustments can enhance treatment effectiveness.

Aim and objectives

To describe the characteristics of IBD pediatric patients (PP) treated with adalimumab in order to **identify features** of those requiring **dose escalation (DS)** for optimization.

Material and methods

Observational retrospective study



January-2019 to July-2024



IBD PP treated with adalimumab

Data collected

- Sex, age, diagnosis, medications, adalimumab levels (AL) after induction, at 6 months, and at 1 year.
- Calprotectin levels and concomitant medication were evaluated at baseline, 6 months, and 1 year.
- Adverse drug reactions (ADRs) and reasons for discontinuation were also recorded

Results

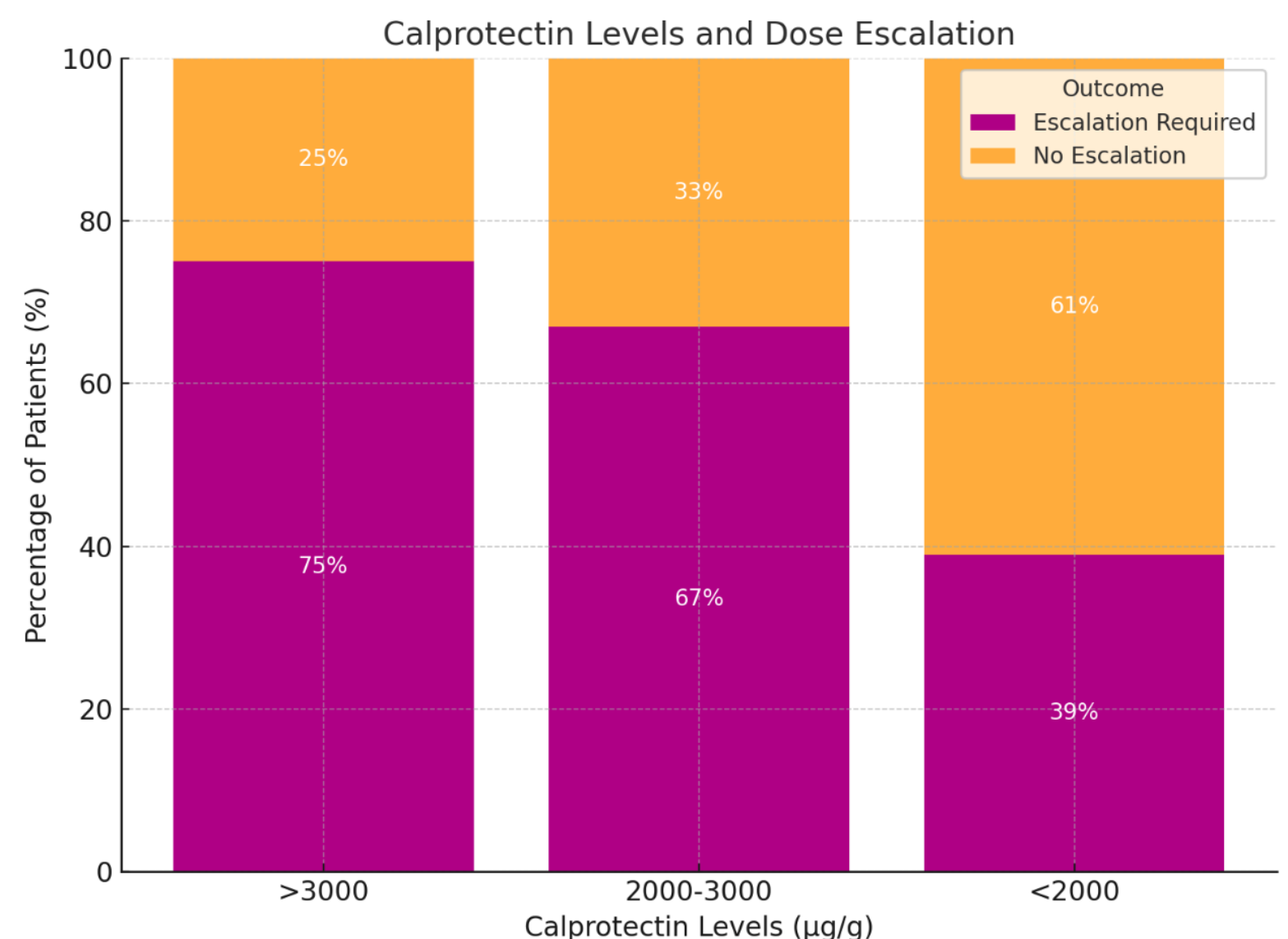
N: 31 patients 64% male Crohn's disease: 84%
 Median age 12 years (IQR 4) Ulcerative colitis: 16%

Medication at baseline

Azathioprine: 71.0%
 Systemic glucocorticoids: 32.3%
 Mesalazine: 16.1%

Time AL	Median AL (IQR)		
	All patients	Dose escalation	Non dose escalation
Induction	11 (5.5)	11 (6.3)	11 (3.0)
6 months	12.1 (5.7)	9.4 (6.8)	12.5 (5.2)
12 months	10.6 (8.2)	8.3 (4.4)	13.2 (7.1)

Dose escalation N: 16 patients



55% of patients with azathioprine had a DS

ADR

Herpes-zoster: 28.6%
 Respiratory infections: 28.6%
 Skin rash: 28.6%
 Headache: 14.6%

N: 7

Treatment discontinuation: 9

66.7%

Secondary loss of response

Conclusion and relevance

This study suggests that **higher doses of adalimumab** may be necessary for IBD PP with baseline **calprotectin levels >2000** or those receiving **concomitant azathioprine**. A proactive pharmacokinetic monitoring approach of AL could optimize treatment and improve outcomes.

