

ADALIMUMAB CONCENTRATIONS PRIOR TO THE IMPLEMENTATION OF THERAPEUTIC DRUG MONITORING IN PATIENTS WITH INFLAMMATORY BOWEL DISEASE

A. GRACIA MOYA¹, A. PAU PARRA¹, P. SÁNCHEZ SANCHO¹, I. CARDONA PASCUAL¹, P. GARCIA ORTEGA¹, B. TORRECILLA VALL-LLOSSERA¹, M.Q. GORGAS TORNER¹, M. MIARONS FONT¹

¹ Pharmacy Service
Vall d'Hebron University Hospital, Barcelona, Spain.

Background and importance

Adalimumab (ADA), an anti-TNF agent, has been shown to induce and maintain remission in patients with inflammatory bowel disease (IBD).

The usual recommended dose in maintenance is 40mg every 14 days.

The formation of anti-adalimumab antibodies (AAA) reduces plasma ADA serum concentrations (ADA_{sc}), as well as its efficacy.

Material and Methods

Observational retrospective study

Inclusion of patients with Crohn's disease (CD) or ulcerative colitis (UC) from July 2016 to April 2019 before applying TDM in a tertiary referral center.

Therapeutic range (TR) of ADA: 8-12 mcg/ml.



Biodemographic, analytical and clinical data were collected from the clinical history.

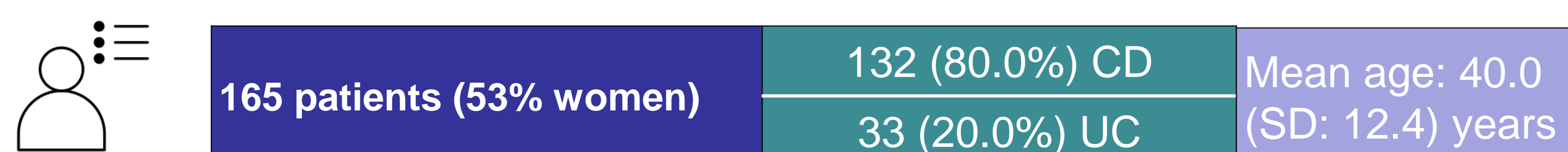
Aim and objectives

As a main objective, to analyze ADA_{sc} and the presence of AAA in patients with IBD prior to the implementation of dose optimization through therapeutic drug monitoring (TDM)

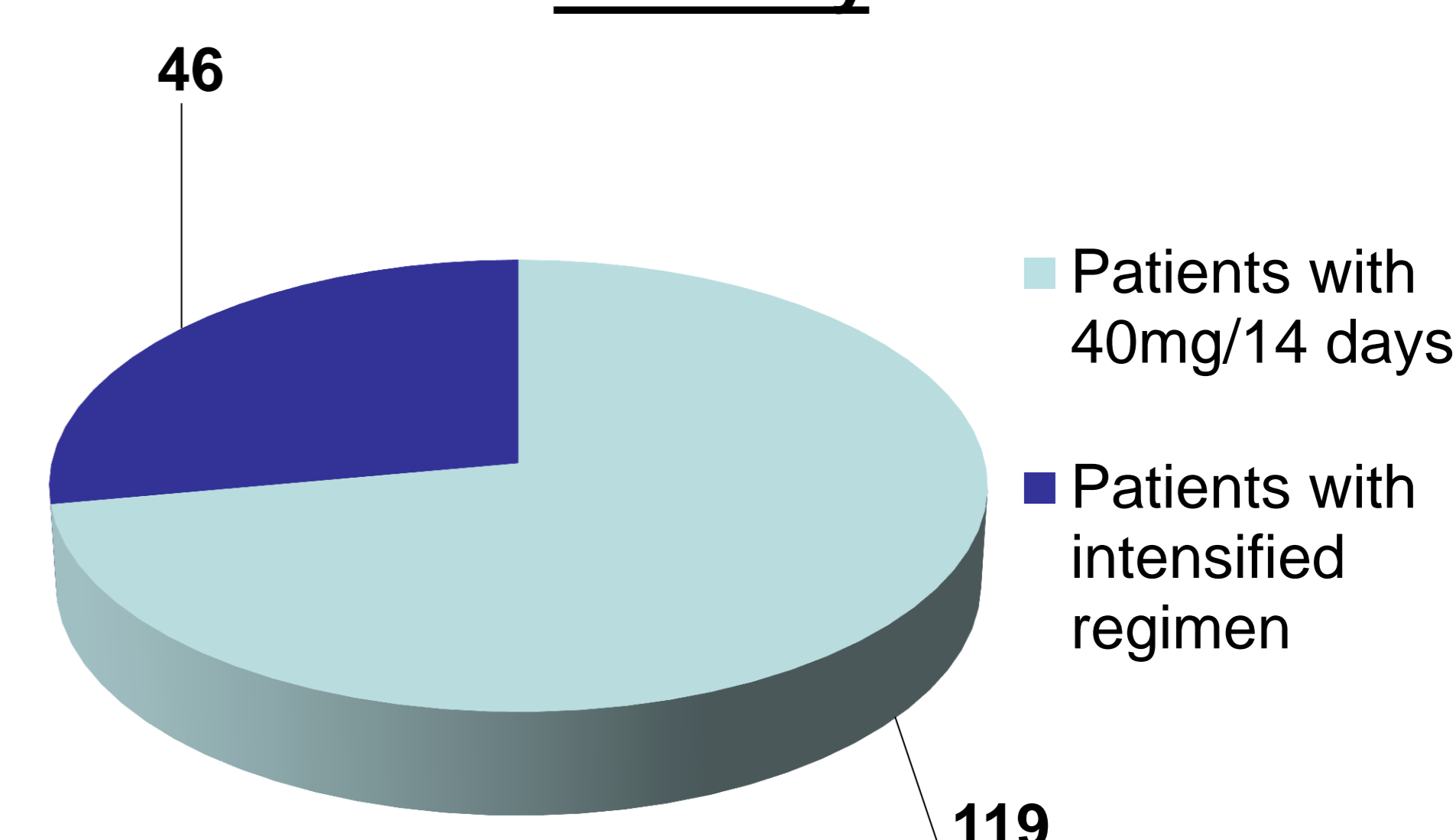
To evaluate changes in the posology

To characterize IBD's symptoms

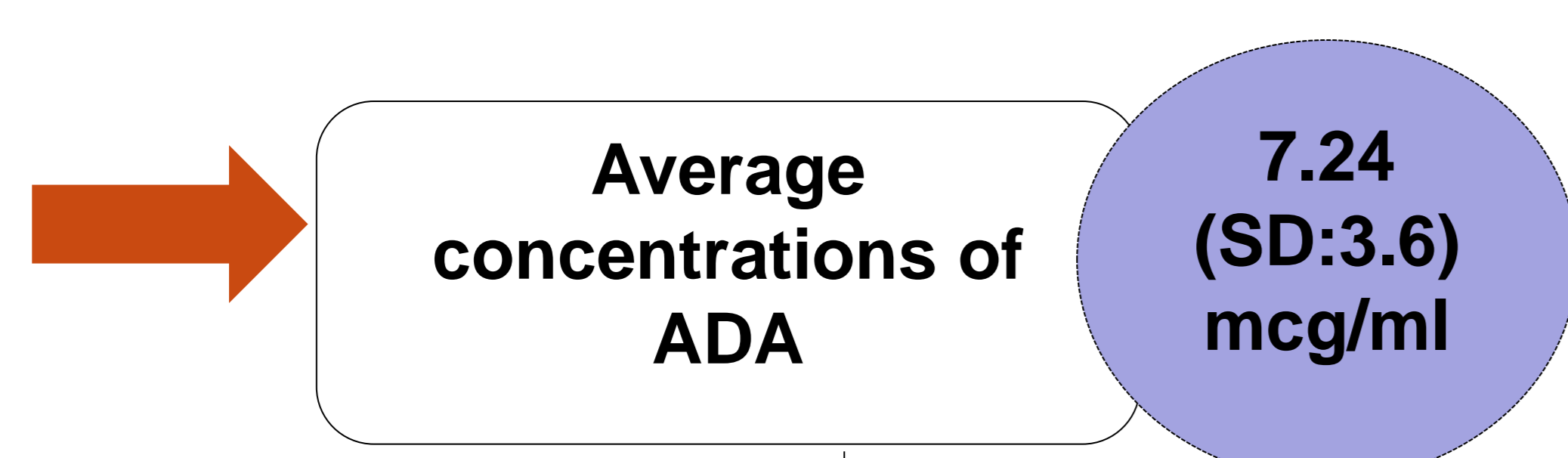
Results



Type of regimen at the beginning of the study

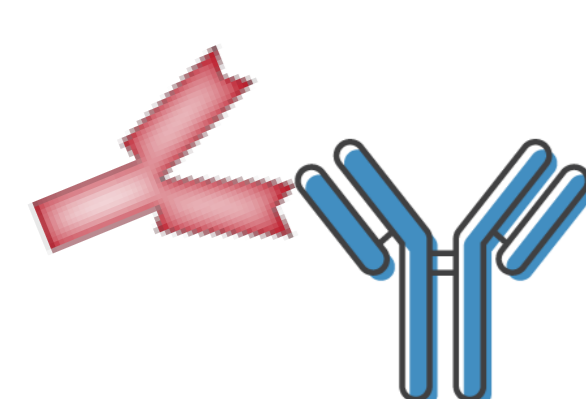


During the study, **regimen intensification** was conducted in 34 (20.6%) of the patients.



Patients with ADA_{sc} outside the TR of total patients: 82 (49.7%)

Patients that presented abdominal symptoms and/or systemic manifestations: 35 (42.7%)



Presence of AAA: 16 (9.7%) patients

Patients with ADA_{sc} outside the TR with AAA: 15 (93.7%)



Conclusions

- ✓ ADA_{sc} outside the TR were observed in half of the patients
- ✓ Approximately AAA were detected in 1 of every 10 patients, and consequently, 93.7% of them presented ADA_{sc} outside the TR.
- ✓ Presented symptoms 42.7% of patients with ADA_{sc} outside the TR.
- ✓ The implementation of a therapeutic drug monitoring (TDM) strategy may be a useful tool for managing patients with inflammatory bowel disease on biologic therapy to reduce the number of patients with ADA_{sc} outside the TR and its consequences.