INDIVIDUALISING THERAPIES THROUGH PHARMACOKINETICS: ADALIMUMAB FOR INFLAMMATORY BOWEL DISEASE

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Background and Importance
Biologic drugs are extensively used for inflammatory bowel disease (IBD) treatment, pharmacokinetics are necessary to reach an optimal IBD control.

Aim and Objectives
To analyze the clinical impact of Adalimumab adjustment through pharmacokinetics in IBD control.

MATERIALS AND METHODS

DESING
Longitudinal prospective study

STUDY DURATION
One year

PARTICIPANTS
IBD patients treated with Adalimumab

Data collected
Collected Before And After intervention!

Analytical data

Demographical

Plasmatic Adalimumab/Anti-drug antibodies (ADAs)

C-Reactive protein (CRP)

Alfa-acid-glycoprotein (AGP)

Symptomatic

Acute phase reactants (APR)

Fecal calprotectin (FC)

Overall patient status

Asymptomatic

RESULTS

84 patients analyzed

41 interventions carried

Only patients with interventions were analyzed

Symptomatic patients

Before intervention

19 (46%)

After intervention

4 (10%)

Analytic parameters

Mean±Standard deviation

P-value

Adalimumab before (µg/ml) 11.52(±6.46) 0.009*

Adalimumab after (µg/ml) 8.98(±1.883)

ADAs before (µg/ml) 0.11(±0.05) 0.434

ADAs after (µg/ml) 0.12(±0.08)

CPR before (mg/dL) 0.52(±0.60) 0.859

CPR after (mg/dL) 0.50(±0.52)

AGP before (mg/dL) 86.84(±41.3) 0.129

AGP after (mg/dL) 78.35(±21.94)

Calprotectin before (µg/g) 387.45(±618.57) 0.009*

Calprotectin after (µg/g) 103.77(±173.21)

CONCLUSIONS

APR improved after interventions.
FC showed a significative p-value.
Monitoring along with patient clinical status is crucial to optimize IBD control.
Monitoring reduces potential adverse effects and saves money.