22ND - 25TH SEP 2026

25th ISoP Global Meeting - Costa Rica

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AMEND CONTINUE

Submission ID

28

Tracks and Topics (required)

I Wider PV horizons: 6 Biological and Biosimilars

Title (required)

The Role of Proactive Therapeutic Drug Monitoring of Infliximab in Patients with Inflammatory Bowel Disease

Introduction (required)

Infliximab (IFX), a monoclonal anti-TNF-α chimeric antibody, is the first biological therapy used in Inflammatory bowel disease (IBD) patients. Therapeutic drug monitoring (TDM) can be appropriate as a strategy in situations of nonresponse to biological therapy as well as reducing of adverse drug reactions (ADR) in high levels of serum IFX (1-3).

Methods (required)

Sixty IBD patients at the University Clinic of Gastroenterohepatology, Faculty of Medicine, Skopje, receiving IFX therapy were monitored for serum drug levels and the presence of antibodies to IFX. Clinical outcomes were assessed using the Crohn's Disease Activity Index (CDAI) and Ulcerative Colitis Activity Index (UCAI). Therapeutic response and remission rates were analyzed in relation to infliximab trough concentrations and immunogenicity status. Patients were systematically assessed for ADR, extraintestinal manifestations, concomitant therapies, reasons for discontinuation of IFX, and time to disease worsening following treatment initiation.

Results (required)

IBD patients with therapeutic IFX concentrations (4.3 mg/mL) demonstrated significantly higher rates of clinical response and remission, as defined by CDAI and UCAI scores. In contrast, the presence of antibodies to IFX was associated with reduced drug levels (0.95 mg/mL), loss of response, and increased risk of therapeutic failure. Adverse effects were more frequently reported in patients with detectable antibodies to IFX, with infusion-related reactions being the most common (4 out of 9). Extraintestinal manifestations were observed predominantly in patients with subtherapeutic infliximab levels (n=27) or immunogenicity (n=9). Concomitant immunosuppressive therapy was associated with lower rates of antibody formation and improved drug persistence. Among patients who discontinued IFX therapy, the primary reasons included loss of therapeutic response, adverse events, and immunogenicity. Notably, patients with detectable antibodies experienced earlier disease worsening compared to those with adequate drug concentrations, indicating a shorter duration of sustained clinical benefit after initiation of IFX therapy.

Conclusion (required)

Proactive therapeutic drug monitoring (TDM) of antidrug antibodies provided prompt and decisive management that mitigated detrimental outcomes of infliximab therapy beyond its clinical efficacy and safety. This emphasizes the integration of therapeutic drug monitoring in the optimization of infliximab treatment.

References (required)

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Conflict of Interest (required)

No conflict of interes

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I confirm that at least one author will register in full to attend and present the abstract poster/oral presentation at the Conference. Unfortunately ISoP would not be able to offer financial support for registration or any other expenses.

Presentation (required)

Poster