The benefit of combination therapy depends on disease phenotype and duration in Crohn’s disease:
A prospective cohort study

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Slides compiled by Dr. Greg Rosenfeld
Introduction

- **Background and objectives**
  - Combination therapy with infliximab and azathioprine (AZA) is associated with higher rates of remission and mucosal healing, but also a higher risk of serious adverse events.
  - Impact of combination therapy on disease-related morbidity in patients with established disease is unknown.
  - **Objective:** To determine the impact of combination therapy with an immunomodulator over anti-TNF monotherapy in Crohn’s disease (CD) and ulcerative colitis (UC) in a multicentre prospective cohort study.

- **Methods**
  - Large prospective cohort of patients with CD and UC from 7 referral centres taking anti-tumour necrosis factor (TNF) monotherapy or combined with AZA.
  - **Primary composite outcome:** Surgery, hospitalizations, penetrating complications, need for steroids or new biologic at 1 year.
Results

- **707 patients with CD**
  - 391 (55%) monotherapy
  - 316 (45%) combination therapy

- **164 patients with UC**
  - 101 (62%) monotherapy
  - 63 (17%) combination therapy

- **Other baseline demographics similar between groups**
  - Similar number on first anti-TNF
  - 75% on Aza, 25% on MTX

- **Multivariate analysis**: Combination therapy was NOT associated with a reduction in the composite endpoint in UC or CD

**Primary endpoint**: CD by phenotype

- **Inflammatory disease (B1)**
  - No reduction in the primary outcome

- **Stricturing (B2) or penetrating disease (B3)**
  - Reduction in primary outcome
  - Greatest effect in disease duration <5 years

AZA: azathioprine; CD: Crohn’s disease; IMM: immunotherapy; MTX: methotrexate; UC ulcerative colitis

*Surgery, hospitalizations, penetrating complications, need for steroids or new biologic at 1 year*
Conclusions

- Combination therapy was more beneficial in complicated CD <5 years
- *Limitations*: Retrospective study, selection bias (e.g., did not control for disease severity)

**Significance to clinical practice**

- Early aggressive treatment for complicated disease may be more effective
- Consider combination therapy in those with a more aggressive phenotype