THE EVOLUTION OF NUTRITIONAL STATUS IN PATIENTS WITH SEVERE FORMS OF CROHN'S DISEASE TREATED WITH INFLIXIMAB

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Background and aim:
The majority of Crohn's disease (CD) patients with moderate to severe flares of activity present with weight loss, sometimes important, malnutrition being observed frequently in this group of patients. The aim of our study was to determine the evolution of nutritional status in patients witch necessitated Infliximab treatment for the control of disease activity.

Methods:
Patients with moderate-severe CD (CDAI>220) with no or suboptimal response to intraveous corticosteroids that received Infliximab and responded to the induction therapy (CDAI reduction with more than 70 points after 3 doses of Infliximab at 0, 2 and 6 weeks) were prospectively followed up for one year, during maintenance treatment with Infliximab (administered at 8 weeks intervals). Weight was measured before the first infusion of Infliximab and during the biologic treatment, at 8 weeks intervals. BMI was calculated for each patient. Patients were classified as normal if BMI>20, with mild malnutrition if BMI 19-20, moderate if BMI 18-19 and severe malnutrition if BMI<18.Ileocolonoscopy was performed at 6 month interval.

Results:
18 patients were included in the study, 8 women and 10 men, with a mean age of 37+/-3.26 years, with moderate-severe flares of CD, six with ileocolonic involvement and 12 with colonic CD. Mean CDAI at week 0 was 354.88+/-14.79 points, while at week 6 in decreased to 244.5+/-16.33 points. During maintenance treatment all patiens reached clinical remission (CDAI<150), after a median time of 14 weeks (mean 16.33+/-1.08) and 55.5% endoscopic remission.

Fig.1 **Prevalence of malnutrition at week 0**

The frequency of malnutrition (BMI<20) in the study population at week 0 was 72.2% (Fig 1).
At the beginning of biological treatment, all patients presented with weight loss and reduced food intake and as consequence in according to NRS2002, the screening tool recommended by ESPEN (European Society for Parenteral and Enteral Nutrition), all our patients, those with low BMI but also those with normal BMI had NRS scores higher than three so needed initiation of nutritional support at week 0.

Our patients received dietary counseling and in those patients in which caloric requirements were not met, enteral supplements (sip feeding) were recommended.
After induction of remission a slow increase in weight was observed, after one year since the start of Infliximab treatment, all patients reached a normal nutritional status (normal BMI)

The mean weight gain was of 5.8+/-1.75 (2-7.8) kg (Fig 2).
The weight gain was observed not only in initially malnourished patients but also in those with normal BMI at inclusion. All patients reported increased food intake after control of intestinal symptoms by Infliximab treatment, mainly due to increased appetite and increased tolerance to food.
Clinical remission was the most important factor associated with weight gain.
There was no difference between patients with and without endoscopic remission regarding the amount of weight gain.

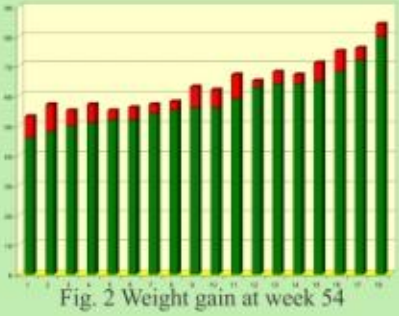

Fig. 2 Weight gain at week 54

***Conclusion:** The nutritional status of patients with severe forms of CD normalizes in all cases when Infliximab treatment determines the induction and long term maintenance of disease remission. The correction of nutritional status is an important benefit of Infliximab treatment for this group of patients, frequently malnourished.*