

# P541. Does smoking increase the need for the use of immunomodulator treatment in Crohn's disease patients?

P. Ellul<sup>1</sup>, C. Saliba<sup>2</sup>, N. Azzopardi<sup>3</sup>, D. Grech Margeurat<sup>3</sup>, G. Laferla<sup>2</sup>, G. Grech<sup>2</sup>, <sup>1</sup>Mater Dei Hospital, Msida, Malta, <sup>2</sup>University of Malta, Malta, <sup>3</sup>Mater Dei Hospital, Malta

## Background

Smoking is one of the more definite environmental factors for IBD. While Ulcerative Colitis is a disease of ex-smokers and non-smokers, Crohn's Disease (CD) is more prevalent among smokers. Recent data have failed to reproduce this association, which might be due to a current wider use of thiopurines and biologic therapy.

**Aim:** To determine if there are any differences between smokers, ex-smokers and non-smokers in the need for immunomodulator (IM) therapy and/or surgery in the management of their CD.

## Methods

Patients (pts) with a histological diagnosis of CD disease were recruited. They were classified as non-smokers, current smokers or former smokers according to their present smoking status. Clinical data regarding disease characteristics, treatment, and complications were collected.

## Results

83 pts (42 female) were recruited. Their current mean age was 39 years (7–73 years). They had a CD duration post-diagnosis of 8.98 years (12 months to 32 years).

80.7% of pts were having IM therapy. 49 pts were on single IM treatment and 18 pts were on dual IM therapy. 16 pts were having 5-ASA as their only medication.

24.1% (20) had CD related surgery. They had 27 surgical interventions.

Table 1 depicts the pt characteristics in terms of smoking status, surgery and need for IM therapy.

Statistical analysis demonstrated that smokers required IM therapy more frequently than non-smokers ( $p < 0.05$ ).

Statistical analysis using chi square for trend [using Statcalc (Epiinfo)] demonstrated a positive linear trend for the use of IM therapy and/or surgery across the 3 groups (Smokers CD versus ex-smokers CD versus non-smokers CD patients) –  $p$  value 0.03.

Table 1. IM treatment, surgery and smoking status	Smokers	Ex-smokers	Non-smokers
Dual IM + Surgery	3	2	3
Dual IM	4	1	10
Single IM + surgery	1	1	6
Single IM	9		18
Surgery	1		3
none	1	2	18
Total	19	6	58

---

## Conclusion

Our data demonstrates that CD smokers were more frequently on IM treatment when compared to non-smokers and there was a positive linear trend across the 3 groups with regards to the need of IM treatment and/or surgery. One of the associations of long term treatment with IM is malignancy, especially if on dual treatment. The issue gets more complicated as to when to stop them if the patient is on remission. Thus, smoking cessation should be emphasised on diagnosis and appropriate professional help provided to these patients.

- **Posted in:** [Poster presentations: Clinical: Therapy and observation](#)