

Italian patients, homeopathy, herbal medicine and exercise by those in the North. More money is spent on CAM in Northern Italy. No differences emerged in terms of disease features, frequency and reasons for using CAM, or perceived effects.

L. Inflammatory bowel diseases 2. Crohn's disease

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ANALYSIS OF THIOPURINE-METHYL-TRANSFERASE (TPMT) GENOTYPE AND PHENOTYPE IN A NORTHERN ITALIAN POPULATION

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Background and aim: Thiopurines are increasingly prescribed for disease activity control in inflammatory bowel disease (IBD). Thiopurine-methyl-transferase (TPMT) genotype and phenotype is expected to be majorly involved in bio-availability and toxicity of thiopurines, and it may vary in different populations. Aim of this study was to explore TPMT genotype and phenotype in a Northern Italian population of healthy controls and IBD patients.

Material and methods: The study protocol was approved by local Ethical Committee. All consecutive IBD out-patients (n=169) and 533 healthy controls (HC) were recruited. A blood sample was drawn, DNA was extracted for genetic analyses and erythrocytes were separated. Major TPMT genetic variants (TPMT*2, *3A, *3B, *3C) were analysed by means of standardised PCR techniques, while intra-erythrocyte TPMT activity was analysed using a standardised high pressure liquid chromatography (HPLC) assay.

Results: Genotype results: TPMT was mutated in 8/169 (4.7%; 95%CI 1.5-8%) IBD cases (7 heterozygous for *3A and 1 for *3C, respectively) and in 34/533 (6.4%; 95%CI 4-8%) HC (28 heterozygous for *3A, 3 for *3B and 3 for *3C, respectively); the difference was not statistically significant (p=0.549). Hardy Weinberg distribution was respected, no mutant homozygous was observed among the cases or controls. No significant differences were noted for any subgroup analysis.

TPMT activity results: the distribution of TPMT activity was different in IBD cases, with distribution not-normal (p<0.001) and significantly lower than among HC (however not-normally distributed, p=0.014). TPMT activity figures are reported in Table 1.

Table 1. TPMT activity

	TPMT		p
	nMol/h/g Hgb	IQR	
HC (n=533)	33.23	26.61-42.04	comparator
IBD cases (n=169)	27.16	21.45-46.85	0.0016
Crohn's disease (n=79)	27.82	20.80-45.11	0.0175
Ulcerative/indeterminate colitis (n=90)	27.02	21.65-29.89	0.0168

No significant TPMT phenotype difference was noted based on IBD subgroups based on TPMT genotype or on other clinical characteristic, but we found that IBD patients on systemic steroids (n=16) had higher median TPMT activity (46.54 nMol/h/g Hgb) compared to those not on steroid treatment (n=153, 26.98 nMol/h/g Hgb), p=0.0023.

Conclusions: This is the first study of TPMT genotypic and phenotypic evaluation on the same population in a Northern Italian population. No difference was observed for TPMT genotype comparing cases and controls. Allelic frequency was lower than expected. TPMT activity was lower in IBD patients compared to healthy controls. Larger groups of patients are under investigation in order to confirm these observations.

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ENDOSCOPIC DILATION OF ILEOCOLONIC STRICTURES IN PATIENTS WITH CROHN'S DISEASE (CD)

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Background and aim: The aim of our study is to assess short and long-term efficacy of endoscopic dilation of symptomatic ileocolonic strictures in patients with CD; the patients had previously underwent or not intestinal resectional surgery.

Material and methods: Between January 2003 and November 2007 we treated 32 following patients (16 m and 16 f, age range 30-75 years; 22 had undergone intestinal resection; follow up 3-59 months, median 32 months). Strictures were located in ileum (4), in terminal ileum (6), in ileocolonic anastomosis (19) and in the colon (3). All patients were studied with colonoscopy and CT Enterography; in last 3 cases MR enterography was performed. In endoscopically inaccessible strictures or severe inflammation, patients were reassessed after 15 days of steroid therapy. An endoscopic treatment was performed for strictures < than 8 cm whereas longer strictures were referred for surgical treatment.

Three days before and 7 days after dilation a steroid systemic therapy was given. Endoscopic dilatation was performed with CRE balloon, starting from a minimum calibre of 6 mm to a maximum of 20 mm; within 8 hours from dilation the patients underwent blood test and X ray of the abdomen. If the first attempt was deemed incomplete or partial, a further dilation was performed in 2 weeks; if the second procedure turned out to be inadequate, patient was referred to surgery (1 pts). CT Enterography/MR enterography was performed after 7 days and in case of good outcome, patients were included in a follow-up program with clinical examination, colonoscopy and endoscopic pneumatic dilation at 3 and 6 months. In our study a reevaluation every 6 months or earlier in case of symptoms was planned. Each patient underwent from 1 to 10 dilations (media 2,9; total dilations 110).

Results: Only 1 patient did not benefit from the treatment (therapeutic efficacy 97%). In our follow up, 28 patients (87.5%) were asymptomatic; 21(67%) presented mild strictures and have been treated again. Three patients (9.5%) had recurrent strictures at 2 and 5 months and despite further dilations, surgery was necessary (2 ileal, 1 anastomotic).

Conclusions: Endoscopic dilation should be considered as first-line therapy for Crohn's patients with short intestinal strictures. Further randomized multicenter studies are still necessary to optimize endoscopic and medical therapy and follow-up.

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TREATMENT WITH ANTI-TUMOR NECROSIS FACTOR ALPHA ANTIBODIES AND SUB-OBSTRUCTIVE SYMPTOMS IN CROHN'S DISEASE: PROSPECTIVE LONGITUDINAL STUDY

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Background and aim: The development of strictures has been reported using anti-TNF α MoAbs in Crohn's Disease (CD). The correlation between anti-TNF α therapy and development of symptomatic stenosis is unknown. Aim was to assess, in a prospective longitudinal study (and in a retrospective analysis), the frequency of sub/obstructions in CD pts treated with anti-TNF α therapies. Secondary aim was to evaluate sonographic findings after anti-TNF α therapy.

Material and methods: Prospective longitudinal study. From jan 2004 to oct 2007, 20 CD pts (11 M, median age 41.5 yrs) were treated with anti-TNF α MoAbs including Infliximab (n=11), Certolizumab