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Background

- ❑ **Acetarsol is an organic-based arsenic compound** historically used to treat bacterial vaginal infections.
- ❑ Small preliminary cohort studies have suggested **good clinical efficacy data for acetarsol in inflammatory bowel diseases (IBD)**.
- ❑ **Mesalazine-refractory proctitis remains a clinical problem** with superior topical therapy warranted.

Objective

- ❑ Our aim was **to describe the effectiveness and tolerability** of acetarsol suppositories in a cohort of IBD patients.

Methods

- ❑ **Retrospective descriptive analysis**
- ❑ **Patients' outcomes exposed to acetarsol between 2004 – 2017 were reviewed.**
- ❑ **IBD clinic - Nottingham University Hospitals.**
- ❑ **Response** was determined as a clinical improvement in symptoms or improvement in endoscopic appearance.
- ❑ **Serum arsenic and C-reactive protein levels** (as requested by the responsible clinician) were also reviewed
- ❑ **Non parametric statistics - P<0.05**

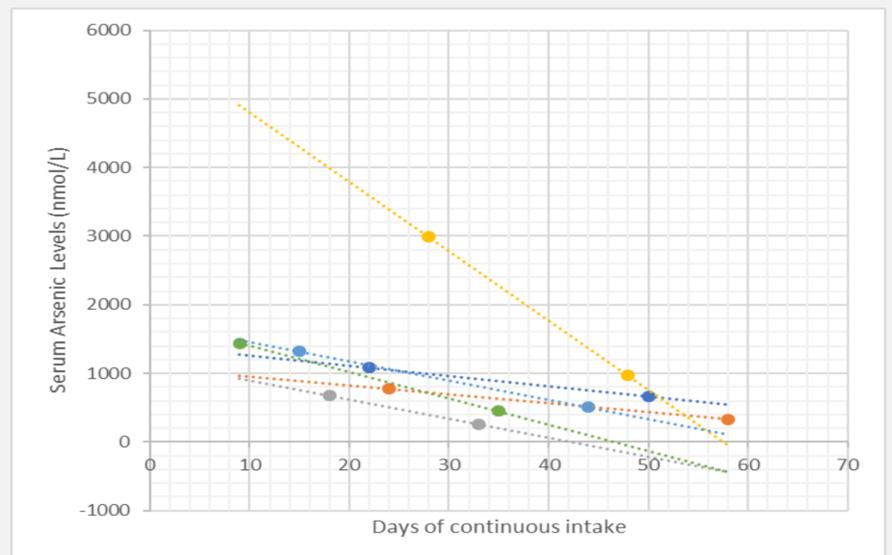
Results

- ❑ Population characteristics are shown in the table below

	N=35
Sex	
Male	20 (57.1%)
Age (Median+ IQR)	44 (21)
IBD type	
Ulcerative colitis	34 (97.1%)
Crohn's Disease	1 (2.9%)
Disease Location	
Proctitis	28 (80%)
Left-Sided colitis	3 (8.6%)
Pancolitis	2 (5.7%)
Diversion colitis	1 (2.9%)
Pouch	1 (2.9%)
Medication Experience	
5-ASA Topical/Oral	32 (91.4%)
Thiopurines	19 (54.2%)
Cyclosporin	3 (8.6%)
Anti-TNF Infliximab	3 (8.6%)
Adalimumab	3 (8.6%)
	0 (0%)
Disease Duration (yrs)	
(Median +IQR)	7 (12)

- ❑ 68.6 % of the sample received acetarsol 250 mg bd for at least 4 weeks

- ❑ **Sixteen patients were exposed to acetarsol more than once**
- ❑ Median treatment duration was 56 days (49)
- ❑ **65.7 % of patients achieved a clinical response and 25.7% clinical remission**
- ❑ Three of 35 patients had an endoscopic assessment with two showing endoscopic improvement
- ❑ **31.4 % of patients required further treatment escalation** following acetarsol exposure (**5** to thiopurines **and 2** to biologics)
- ❑ **9/35 underwent subtotal colectomy** within the next 6 years
- ❑ Over the follow-up period, 1 patient admitted for acute arsenic poisoning, while 5/35 experienced possible acetarsol-related adverse events. [1 headache, 1 vomiting, 1 perianal pruritus and paraesthesia, 1 blepharitis and 1 sweating, palpitations and weakness]. and discontinued acetarsol
- ❑ **Serum arsenic levels were significantly reducing over time indicating possibly decreased absorption due to mucosal healing.** (see figure)



- ❑ **Serum arsenic levels were not correlated with the patient response, the occurrence of side effects, the need for surgery nor the need for escalating treatment. (p> 0.05)**

Conclusions

- ❑ **Acetarsol suppositories could be an effective and tolerable option** in the management of refractory proctitis.
- ❑ **A definitive study is urgently warranted** to thoroughly investigate the clinical efficacy and safety of this promising drug.

References

Forbes A, et al. Aliment Pharmacol Ther. 1989 Dec;3(6):553-6.