Enteric and sexually acquired pathogens in men who have sex with men with clinical proctitis

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Background:
Rectal infections are common in men who have sex with men (MSM) and may increase HIV risk. This study aimed to determine enteric and sexually acquired rectal pathogens among MSM presenting with non-chlamydial, non-gonococcal proctitis and to compare these with MSM without proctitis.

Methods:
This was a retrospective study performed on stored anorectal swab samples obtained from MSM attending Melbourne Sexual Health Centre between January 2017 and March 2019. We identified anorectal samples from MSM with a clinical diagnosis of proctitis where anorectal NAAT was negative for *Neisseria gonorrhoeae* and *Chlamydia trachomatis*. Anorectal samples from MSM with no proctitis symptoms were used as a comparison group. Samples were NAAT tested for viral, bacterial and protozoal enteric pathogens using the AusDiagnostics Faecal Pathogen M 16-well assay and STIs using the Resistance Plus® MG for *Mycoplasma genitalium* and PlexPCR® VHS for HSV-1, HSV-2 and *Treponema pallidum*.

Results:
Anorectal samples from 499 men with symptomatic proctitis and 507 asymptomatic men were analysed. Among men with proctitis, 38% were HIV negative and taking HIV PrEP and 16% were HIV positive. *Shigella* was detected more frequently among men with proctitis compared to asymptomatic men (n=14, 2.8% [95%CI: 1.5-4.7%] *vs* 1.0% [95%CI: 0.3-2.3%]; $p<0.001$). Most men with proctitis and *Shigella* did not report diarrhoea. *T. pallidum* was more common in men with proctitis (n=18, 3.6% [95%CI: 2.2-5.6%] vs 0% [95%CI: 0-0.7%]; $p<0.001$). Most men with anal *T. pallidum* presented with painful anal primary infections. Also more common among men with proctitis were: *M. genitalium* (9.4% [95%CI: 7.0-12.3%] vs 5.2% [95%CI: 3.4-7.4%];

p=0.009) and HSV-1 and HSV-2 (17.4% [95%CI: 14.2-21.1%] vs 3.7% [95%CI: 2.6-6.3%]; *p*<0.001).

Conclusion:
Testing for *Shigella* and *T. pallidum* should be considered in MSM presenting with symptomatic proctitis. These data support an aetiological role for *M. genitalium* in proctitis.

Disclosure of Interest Statement:
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