

Proctitis/Proctocolitis Table of Evidence

Citation	Study Design	Study Population	Exposure/Intervention	Outcome	Findings	Design Analysis Quality/Biases
Treatment of asymptomatic rectal CT						
Steedman NM, McMillan A. Treatment of asymptomatic rectal <i>Chlamydia trachomatis</i> : is single-dose Azithromycin effective? Int J STD AIDS 2009;20:16-18. ²	Retro-spective analysis of case notes	All patients with rectal CT in GUM clinic, Edinburgh, 6/05-6/06 N=101	Asymptomatic rectal CT pts treated with azithromycin	Treatment failure/ TOC after 21 days	101 rectal CT infxn's; 92 (91%) asymptomatic and 78/92 were treated with Azithro 1 g 68/78 (87%) returned for TOC 9 (13%) were positive 8/9 had sexual contact b/w treatment and TOC	26% of the patients were NOT treated with Azithro and they were not included in the analysis Did not try to rule-out repeat infxn (vs. treatment failure) Did not report time to TOC
Elgalib A, Alexander S, Tong CY, White JA. Seven days of doxycycline is an effective treatment for asymptomatic rectal Chlamydia infection. Int J STD AIDS. 2011; 22(8):474-7. ³	Prospective single-arm cohort	487 men with asx rectal CT at a UK GUM clinic b/w 9/06 and 9/09. Analysis restricted to 165 men who had a TOC.	Doxy x 7 days for asx rectal CT (Sx pt's with rectal CT treated with doxy x 21d) Assay: BD Probe Tec SDA (through 9/08), then Aptima Combo 2 TMA Starting in 12/06, all CT-pos specimens from symptomatic pt's tested for LGV	Treatment failure/ TOC after 28 days	766 rectal CT infxn's during study period; 487 (64%) asymptomatic 163/165 (99%) of TOC were negative Median time to TOC 45 (IQR 34-88) 51/279 (18%) symptomatic rectal CT+ were LGV	No comparison group Only 34% of men with asymptomatic rectal CT included in analysis
Drummond F, Ryder N, Wand H, Guy R, Read P, McNulty AM, Wray L, Donovan B. Is azithromycin adequate treatment for asymptomatic rectal	Retro-spective case note review	116 men with asx rectal CT at Sydney sexual health ctr in 2009 who were treated with	Azithro 1 g x 1	Treatment failure/ TOC after 6 weeks	125 rectal CT infxn's during study period; 116 (93%) asymptomatic 85/116 (73%) returned for TOC	No comparison group Defined "possible treatment failure" as those who did

Chlamydia? In J STD AIDS 2011; 22(8): 478-80. ⁴		azithro 1 g			11 (13%) positive; 5 (6%) were suspected failure (as opposed to repeat infxn) “apparent” treatment efficacy = 94% Median time to TOC 78 days (range 21-372)	not report anal sex or bc condoms used consistently No sig differences b/w those who retested and those who did not
Hathorn E, Opie C, Goold P. What is the appropriate treatment for the management of rectal <i>Chlamydia trachomatis</i> in men and women? STI 2012;88:352-54. ⁵	Prospective observational cohort study; compared cohort 1 (1/1/10-6/30/10) to cohort 2 (10/1/10-3/31/11)	Compared cure rates among cohort 1 (all pt’s with rectal CT received azithro 1 g) to cohort 2 (all pts received doxy 100 BID x 7 days)	Azithro 1 g x1 vs. Doxy 100 mg PO BID	Treatment failure (defined as positive TOC after 21 days with risk of repeat infxn and non-compliance excluded)	265 pts with rectal CT; 260 (98%) asymptomatic Phase 1: 89/105 treated with azithro 42/89 (47%) returned for TOC 11/42 + (26%) 9/11 likely treatment failure; 21% treatment failure Phase 2: 78/156 treated with doxy 40/78 (51%) returned for TOC 2/40 + (5%) 1/5 (20%) symptomatic rectal CT + LGV	44% of study population women Not randomized Pre-post policy change analysis Low rates of follow-up for TOC Included symptomatic pts (but only 5)
Khosropour CM, Dombrowski JC, Barbee LA, Manhart LE, Golden MR. Doxycycline is superior to azithromycin for the treatment of rectal Chlamydia. Abstract 2013.	Retro-spective cohort study	Men diagnosed with rectal CT at Seattle STD clinic b/w 1993-2012 if they were treated with azithro or doxy w/i 60 d. of	Azithro 1 g vs. Doxy 100 BID	Treatment failure/TOC after 14-180 d.	1835 cases (83% asx) 1480 (81%) treated with azithro or doxy TOC return rates: 407/1231 (33%) azithro 95/249 (38%) doxy % Recurrence/persist.	Low rates of f/u for TOC (but did not differ b/w treatment groups) Long chronologic period - ? secular trends, diagnostic modality

		diagnosis and returned for TOC between 14-180 d.			<p>TOC</p> <table border="1"> <tr> <td>Azithro</td> <td>Doxy</td> </tr> <tr> <td>14-30 4/53 (8)</td> <td>0/20 (0)</td> </tr> <tr> <td>14-60 23/136(17)</td> <td>0/36(0)</td> </tr> <tr> <td>14-90 50/230(22)</td> <td>2/56(4)</td> </tr> <tr> <td>14-180 88/407(22)</td> <td>8/249(8)</td> </tr> </table>	Azithro	Doxy	14-30 4/53 (8)	0/20 (0)	14-60 23/136(17)	0/36(0)	14-90 50/230(22)	2/56(4)	14-180 88/407(22)	8/249(8)	<p>Imbalance in numbers b/w arms</p> <p>Included sx and asx cases</p>		
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Khosropour CM, Duan R, Metsch LR, Feaster DJ, Golden MR. Persistent/recurrent chlamydial infection among STD clinic patients treated with CDC-recommended therapies. Abstract 2013.	Secondary data analysis of RCT of behavioral HIV prevention intervention	Women with urogenital CT and men with urethral and/or rectal CT who were treated with azithro or doxy	Azithro 1 g vs. Doxy 100 BID	Persistent/recurrent infection at 6-months post treatment	<p>492/5012 (9.8%) of ppts had either urogenital or rectal CT</p> <p>338 (69%) treated with azithro (255; 75%) or doxy (83; 25%)</p> <p>F/u: Doxy – 76/83 (92%) Azithro – 225/255 (88%)</p> <p>Prevalence at 6 mo:</p> <table border="1"> <tr> <td></td> <td>Azithro</td> <td>Doxy</td> </tr> <tr> <td>Overall</td> <td>26 (11.6)</td> <td>7 (9.2)</td> </tr> <tr> <td>Urogen</td> <td>18/179(10)</td> <td>6/60 (10)</td> </tr> <tr> <td>Rectal</td> <td>8/49 (16.3)</td> <td>2/21 (9.5)</td> </tr> </table>		Azithro	Doxy	Overall	26 (11.6)	7 (9.2)	Urogen	18/179(10)	6/60 (10)	Rectal	8/49 (16.3)	2/21 (9.5)	<p>Better f/u than other studies</p> <p>Unclear why 1/3 were not treated with azithro or doxy</p> <p>TOC at 180 d. – most likely repeat infxn; unclear why this might be more likely in azithro arm?</p> <p>Symptoms?</p>
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Proctitis epidemiology and management: General																		
Studemeister A. CMV Proctitis: A rare and disregarded STD. STD 2011;38:876-878. ⁶	Case series	Lit review			Described 7 cases of sexually transmitted CMV proctitis, 5/7 were HIV neg.. Has mono-like symptoms and rectal bleeding.													
McMillan A, Kell P, Ward W for BASHH. Diagnosing chlamydia and managing proctitis in men who have sex with men: current UK practice. STI 2008;84:97-00. ⁷	Cross-sectional survey	GUM clinics in UK in 2006	Questions concerned clinical practice regarding testing MSM for CT, clinical approach, use of rectal smear, CT TX	106/185 questionnaires returned (57%)	NAATs used 60% screened all MSM Anoscopy offered in 93%; rectal smear 71% with 64% doing microscopy. Only 58% used tx regimens recommended for LGV in men with symptomatic CT proctitis.													

					Of 106 clinics surveyed: 29% used azithro 1 g for asymptomatic rectal CT 26% doxy 100 mg BID x 7 days 19% either	
Francis SC, Kent CK, Klausner JD, Rauch L, Kohn K, Hardick A, Gaydos CA. Prevalence of rectal trichomonas vaginalis and mycoplasma genitalium in male patients at the San Francisco STD Clinic, 2005-2006. ⁸	Cross-sectional	500 consecutive rectal specimens collected Nov 2005-Jan 2006 from MSM who reported RAI			MG was strongly associated with HIV+ but weekly associated with rectal symptoms or clinical proctitis. 3+ TV PCRs detected.	
Lymphogranuloma Venereum						
De Vrieze N, Rooijen M, van der Loeff M, de Vries H. Anorectal and inguinal LGV among MSM in Amsterdam: trends over time, symptomatology and concurrent infections. STI 2013(0):1-5. ⁹	Longitudinal cohort study	All MSM seen at Amsterdam STD clinic b/w 1/05 and 6/12; analyzed MSM diagnosed with rectal or ulcerative CT	Observational Assay: Aptima Combo 2; CT pos. specimens tested with <i>pmpH</i> in house rtPCR for LGV	Symptoms, clinical and anoscopic inflammatory signs, STI co-infections	3628/35,650 (10.2%) pos for rectal CT 411/3628 (1.2%) LGV 65/1649 (3.9%) ulcer swabs pos for CT; 10/65 (0.6%) LGV LGV positivity fluctuated b/w 0.1 and 2.5% b/w 2005-2009 195/327 (59.6%) of rectal LGV CT was symptomatic; 27.2% had neither symptoms nor signs on anoscopy (compared with 73% of rectal non-LGV CT)	For analysis of symptomatology of LGV, excluded pts who were co-infected with GC and LGV No discussion of treatment
Ward H, Alexander S, Carder C, Dean G, Ison CA. Prevalence of LGV infection in MSM: results of a	Period prevalence of LGV and non-LGV	MSM attending 4 GUM clinics in UK during study period	Testing for urethral and rectal LGV and non-LGV CT	Prevalence and correlation with symptoms	472/6778 (7.0%) rectal samples positive for CT, 87.1% were non-LGV CT; 13% LGV	Some of LGV cases were co-infected with GC; therefore difficult to know if

multicentre case finding study. STI 2009;85:173-175. ¹⁰	rectal CT in 4 UK clinics between 2006 and 2007				; Overall 0.9% prevalence of LGV in rectum 58/61 (95%) of rectal LGV CT was symptomatic 49/301 (16%) of rectal non-LGV CT was symptomatic	symptoms were from GC or LGV
Mechai F, Barbeyrac B, Aoun O, Merens A, Imbert P, Rapp C. Doxycycline failure in LGV. STI 2010;86:278-9. ¹¹	Case report	HIV pos MSM with LGV and discharging anal sinuses after >21 d. of doxy	Moxifloxacin 400 mg daily x 10 days	Clinical response	Responded to moxi w/l 10 d	
Hill SC, Hodson L, Smith A. An audit on the management of LGV in a sexual health clinic in London, UK. Int J STD and AIDS 2010. ¹²	Clinic audit	Compared clinic practice with BASHH auditable outcomes		1) % of pts with symptomatic rectal CT that were tested for LGV in 2008 2) Treatment regimen 3) Screening for concomitant STIs 4) Had TOC 4-6 weeks after finishing treatment	45/46 pts with sx rectal CT were tested for LGV, 9 (20%) were pos From 2005-2009, 55/63 (87%) treated with doxy, 7 (11%) with azithro 1 g weekly x 3 weeks 17/63 (27%) also had rectal GC Of 7 pts treated with azithro: 4 had TOC – all neg 2 missed TOC, screened later – neg 1 declined TOC but clinically improved	
Annan NT, Sullivan AK, Nori A, Nwokolo N. Rectal Chlamydia – a reservoir of undiagnosed infection in men who have sex with men. STI 2009;85:176-	Cross-sectional	All MSM with a hx of RAI seen at GUM clinic in UK from 11/05-10/06		Prevalence of CT (LGV and non-LGV) and correlation with symptoms	247/3017 (8.2%) pos for rectal CT 171/247 (70%) asx 35/247 (14%) were LGV + 29/35 (83%) symptomatic	

179. ¹³						
De Vries HJ, van der Bij AK, Fennema JS, Morre SA. LGV proctitis in MSM is associated with anal enema use and high risk behavior. STD 2008;35:203-208. ¹⁴	Cross-sectional (? Or case control)	125 MSM seen at STD clinic in Amsterdam b.w 8/04-8/06 who were diagnosed with either: Proctitis of unknown etiology Non-LGV CT proctitis LGV proctitis GC proctitis	Sociodemographics, risk behavior, clinical presentation in pts with LGV vs. non-LGV proctitis		32 (26%) LGVP – 7 coinfecting with GC 22 (18%) GC proctitis 30 (34%) non-LGV CT proctitis 40% of men with LGVP had few complaints and/or no physical abnl LGVVP assoc with use of enemas, sex at sex parties, sex with HIV-pos partners; sex toys assoc with lower LGVP risk	Unclear how they sampled the men with proctitis; ? convenience. What were the biases in their sampling technique?
De Vries HJ, Smelov V, Middleburg JG, Pleijster J, Speksnijder AG, Morre SA. Delayed microbial cure of lymphogranuloma venereum proctitis with doxycycline. Clin Inf Dis 2009;48:e53-6. ¹⁵	Prospective two-arm cohort analysis	Men reporting receptive anal sex in previous 6 months were screened with anoscopy, men with > 10 WBCs/hpf given dx of proctitis 31 men with LGV proctitis; 31 men with non-LGV proctitis	Standard treatment with doxycycline 100 mg PO BID x 7d for CT + (Cobas amplicor DNA) or 3 weeks regimen for Biovar-L analysis +; Repeat DNA testing with biovar determination at week 1,2,3 and 6 AND swabs for RNA extraction (TMA analysis)	Cure or failure determined by CT DNA and RNA persistence in anal swab specimens	20 LGV patients: RNA persisted up to 16 days in one patient; In 26 non-LGV, RNA was undetectable after 7 days 6/16 patients with LGV had persistent mucous membrane abnl after 21 days of treatment No assoc b/w delayed micro cure and persistent mucosal abnl; No value in extending LGV therapy to 42 days	Excluded 11 LGV and 5 non-LGV CT+ cases because of >1 missed visit Small sample size; no control group (i.e. all LGV patients received 21 days of doxy)
Van der Bij AK, Spaargaren J, Morre SA, Fennema HAS, Mindel A, Coutinho RA, De Vries HJ. Diagnostic and Clinical implications of	Case-control	87 LGV L2b; 377 CT + non-LGV 2677 MSM with exposure but	Amsterdam clinic 2002-2003	Risk factors and clinical predictors	LGV: HIV+ OR 5.7 Also proctoscopic findings (red, swollen, and/or easily bleeding mucosa and/or mucopurulent D/C) and >10	No info about treatment High prevalence of LGV (87/466; 19%)

anorectal LGV in MSM: A retrospective case-control study. Clin Infect Dis 2006;42:186-194. ¹⁶		CT-			WBC/hpf on anorectal smear Gram stain Recommend syndromic LGV treatment for above findings in MSM with proctitis if LGV testing is not available Many were asymptomatic: 2% had self-reported anorectal pain or discharge, 47% had proctoscopic signs	of rectal CT were LGV Many LGV pts asymptomatic
Hamill M, Benn P, Carder C, Copas A, Ward H, Ison C, French P. The clinical manifestations of anorectal infection with LGV vs non-LGV strains of <i>Chlamydia trachomatis</i> : a case-control study of homosexual men. Int J STD and AIDS 2007; 18:472-475. ¹⁷	Case -control	63 men with symptomatic rectal CT (32 LGV and 31 with non-LGV CT)	London GUM clinic and GU medicine service within HIV outpatient service; Individ who reported any rectal symptoms	Determine clinical presentation and demographic/behavioural risks	LGV 4.1 OR for rectal discharge Otherwise LGV and non-LGV were similar in terms of frequency and type of rectal symptoms reported	All patients were symptomatic High prevalence of LGV (32/63; 51%) of rectal CT were LGV
Conference abstracts						
Bissessor M. Characteristics of LGV infection among homosexual men in Melbourne. ISSTD 2011. ¹⁸	Cross-sectional study	MSM with symptomatic CT+ rectal infxn			21/292 CT+ specimens (7/2%) pos for LGV	
Hardick J, Quinn N, Piwowar-Manning E, Cummings V, Marsiglia VC, Gaydos CA. Multi-site screening for LGV in the USA. ISSTD 2011. ¹⁹		1671 rectal samples from AA MSM in HPTN 061 (Brothers) AND 127 samples from symptomatic rectal CT +			112/1671 (6.75%) HPTN 061 samples CT+; 102/102 neg. for LGV 2/127 (1.6%) samples from symptomatic rectal CT+ pos Baltimore pts were pos for LGV	

		MSM in Baltimore				
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