Managing Rectal GC: Room for Improvement

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Background

- The majority (51%) of gonorrhoea (GC) occurs in men who have sex with men (MSM)¹ with approximately one quarter presenting with rectal infection².
- Associated problems include antibiotic resistance² and increased risk of other sexually transmitted infections (STIs) including HIV^{2,3}.
- BASHH provide guidelines on GC testing, treatment and partner notification^{4,5}.

Aim

- To compare our clinic's performance of managing rectal GC to the national recommendations.

Methods

- Retrospective case-note review of confirmed cases of rectal GC on nucleic acid amplification testing (NAAT) over a 4-year period between 3rd November 2011 and 3rd March 2015.
- Data were obtained from clinic notes, the clinic database and laboratory results.
- Self-set audit standards were based on BASHH guidelines⁴.

Results

- 184 cases from 156 men were analysed.
- The majority were white (61%) and MSM (71%) with a median age of 31 (IQR 26, 37) years (Table 1 and Fig 1).
- Triple site testing (rectal, urethral and pharyngeal NAAT) was done in 81% (Fig 2).
- Rectal GC cultures were taken in 55% (Fig 3).
- Adequate treatment with first-line treatment of ceftriaxone 500mg IM and azithromycin 1g PO (spectinomycin 2g IM if penicillin/cephalosporin allergic) was given to 74% (Fig 4).
- Antibiotic resistance occurred in 30%, but this was not against first-line treatment options (Fig 5).
- Partner notification in preceding 3 months was initiated in 40% (Fig 6).
- Other STIs at the time of rectal GC diagnosis (including chlamydia, lymphogranuloma venereum [LGV], syphilis and herpes simplex virus [HSV]) were diagnosed in 14% (Table 2).
- Rectal test of cure occurred in 44% with just under three-quarters of these occurring within the recommended time of period of 2 weeks after treatment (Fig 7).
- There were 2 new cases of HIV at the time of GC diagnosis and 2 further cases at 3-month follow up testing (Fig 8).

Table 1: Ethnicity and age (n=156)

Ethnicity	N (%)	Median age (IQR), years
White	95 (61%)	32 (26, 37)
Black	19 (12%)	27 (24, 35)
Other	42 (27%)	31 (26, 41)

Figure 3: Cultures taken (n=184)

Standard set: 80%

The proportion of rectal GC cultures taken was substantially below the standards. Other cultures were taken (urethral or pharyngeal) in 12% or no cultures were taken at all.

Figure 6: Partner notification (n=184)

Standard set: 100%

Just under half of cases attempted to initiate partner notification which was well below expected standards.

Table 2: Other STIs (n=184)

Other STI	N (%)
Chlamydia	20 (11%)
LGV	3 (2%)
Syphilis	1 (1%)
HSV	2 (1%)

Figure 1: Sexual orientation (n=156)

Sexual orientation was not specified if patients chose not to enter this detail upon registration.

Figure 4: Adequate treatment given (n=184)

Standard set: 100%

Adequate treatment given was below the standards set.

Figure 7: Test of cure (n=184)

Standard set: 100%

Test of cure by NAAT did not occur in 54% and only 32% underwent test of cure within 2 weeks after initial treatment as recommended by guidelines.

Figure 2: Triple site testing (n=184)

Standard set: 100%

Triple site testing did not reach the set standards.

Figure 5: Resistance patterns (n=151)

GC strains were most resistant against quinolones (21%) followed by smaller proportions against penicillins and beta lactamases. Only 38% were fully sensitive and worryingly almost a similar number of cultures were negative.

Figure 8: HIV testing within 3 months of GC diagnosis (n=184)

Standard set: 100%

Over three quarters of cases consented to HIV screening in which 4 new cases (2 at time of GC diagnosis and 2 at 3-month retest) were diagnosed. Just over one-fifth of cases declined further screening.

Conclusions

- Management of rectal GC did not reach the BASHH targets on any recommendation, suggesting that improvements in managing rectal GC are needed within our clinic.
- Insufficient documentation resulted in difficulty establishing clarity of management.
- Re-testing and re-attendance were poor, with some patients attending other clinics for treatment.
- Staff have received further training and a re-audit in 2017 will assess improvements.
- We have established a robust call/recall system to enable early diagnosis of HIV which was significant in our cohort.

- Public Health England. Jan 2016. Table 2: STI diagnoses & rates by gender, sexual risk & age group, 2010-2014
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