



Prevalence of anal injuries in clients attending Saint Mary's Sexual Assault Referral Centre following an allegation of anal penetration

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Background

Frequently forensic physicians are asked to interpret their findings to inform court proceedings, relating to anal injuries in the context of sexual assault.

However, there is a dearth of quality evidence on anal injuries following an allegation of non-consensual anal penetration.

The two key papers^{1, 2} in this topic area look only at female complainants and neither clearly define what type of anal penetration has occurred.

Aim

To assess the prevalence of anal injuries in clients following an allegation of anal penetration.

Methods

Design: Retrospective analysis of case notes from calendar years 2016 and 2017

Inclusion criteria:

- Male and female clients of any age.
- Clear recollection and communication of non-consensual anal penetration.
- Documentation of pubertal status in the clinical notes.

Results

A total of 233 eligible clients attending the St Mary's Sexual Assault Referral Centre in the years 2016-2017 were included in study.

Age, Median [range]	Female N=154		Male N=79	
	Post Pubertal 132 (84.6%)	Pre Pubertal 22 (14.1%)	Post Pubertal 53 (63.9%)	Pre Pubertal 26 (31.3%)
	27.0 [12.0, 83.0]	5.0 [2.0, 10.0]	26.0 [14.0, 51.0]	5.5 [2.0, 11.0]

In post pubertal female clients the most commonly reported type of anal penetration was penile anal (77.3%). In pre pubertal females the most common type of anal penetration was digital anal (54.5%).

More post pubertal female complainants had an injury visible at the time of examination (24.2%) than prepubertal females (4.5%).

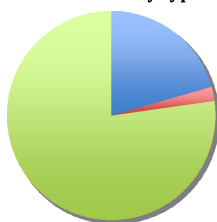
In post pubertal male clients nearly all clients reported penile anal penetration (96.2%). Similarly in prepubertal males the most common type of reported anal penetration was penile anal (53.8%) and then digital anal (38.5%).

Injury rates detected at the time of examination were similar between females (24.2%) and males (28.3%) in the post pubertal complainants.

More expedient examinations lead to increased rates of injury detection, analysis showed statistical significance ($p < 0.006$).

Clients examined at <24 hours were significantly more likely to have an injury detected than those examined at > 72 hours.

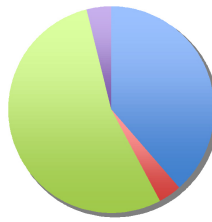
Post-pubertal Females anal assault by type



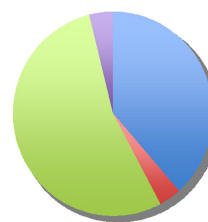
Pre-pubertal females anal assault by type



Post-pubertal males anal assault by type



Pre-pubertal Males anal assault by type



■ digital ■ object ■ penile ■ unknown

Implications

These preliminary findings suggest that the vast majority of complainants of anal penetration do not have injuries visible at the time of examination and this is an important fact to be conveyed to the criminal justice service.

The likelihood of detecting an injury is greater the sooner a client is examined so robust triage systems should be in place since forensic evidence declines with time.

Further research is needed to consider other variables which may alter injury rate. Prospective data collection informed by this study will be the next step.

Further analysis will look at the 16 clients included in the study who had more than one type of anal assault to see if they have a higher rate of anal injury and have any influence on the overall results.

References

- 1) Hilden. M, Schei. B, Sidenius. K (2005) Genitoanal injury in adult female victims of sexual assault. *Forensic Science International*, 154. P.200-205
- 2) Sugar. N. F, Fine. D.N, Eckert. L.O (2004) Physical injury after sexual assault: Findings of a large case series. *American Journal of Obstetrics and Gynaecology*, 190 p 71-76.