

Learning high resolution anoscopy: one trainee's baseline performance metrics in an Australian anal dysplasia and cancer service

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Background:

High Resolution Anoscopy (HRA), considered the 'gold-standard' in assessing anal cancer precursors, is technically challenging and potentially prone to missing disease. We assessed one trainee anoscopist's performance against agreed, published metrics to identify baseline strengths/achievements and areas for improvement.

Methods:

Results were analysed from the trainee's first 50 HRAs with concurrent cytology and histology performed in a tertiary referral service, November 2019-March 2020. Where indicated, High-risk Human Papilloma Virus ('HR-HPV') testing occurred. Histology was reported using: negative, low-grade squamous intraepithelial lesion ('LSIL'), high-grade SIL ('HSIL', comprising Anal Intraepithelial Neoplasia 2 and 3). Metrics included satisfactory HRAs (entire squamo-columnar junction viewed, target of $\geq 90\%$), satisfactory cytology/histology (target of $\geq 90\%$), HRA duration (target of $\geq 90\%$ <15 minutes) and mean biopsies per new referral (target of >1).

Results:

50 HRAs were performed on 49 patients. Mean age was 57 years (range 23 – 76). 43 (86%) identified as male, of whom 34 (78%) were living with HIV. 14 (28%) HRAs were new referrals. 12 (24%) HRAs were performed on patients with a history of anal cancer. 25 (57%) of 44 were positive for HR-HPV 16. Cytology prediction was negative for SIL in 5(10%), possible LSIL/LSIL in 22 (44%), possible HSIL in 7(14%) and HSIL in 16 (32%). Histology was negative in 7(14%), LSIL in 10 (20%) and HSIL in 33 (66%). Composite (cytological and/or histological) HSIL was detected in 34 (68%) cases. No new cancers were diagnosed. 49/50 (98%) HRAs were satisfactory, with no unsatisfactory cytology/histology results. 20 (40%) HRAs lasted <15 minutes. Mean biopsy number was 1.7. 15/16 (94%) HRAs with cytological predictions of HSIL yielded matching histology (≥ 1 HSIL histology result).

Conclusion:

In under 6 months most standards were achieved, except for HRA duration. Assessment of the trainee's next 50 HRAs will allow for further valuable quality assurance.

Disclosure of interest statement:

The authors declare no conflicts of interest.