Endo-cervical Sampling (Curettage) Has No Place in Colposcopy Practice

John Tidy
Professor of Gynaecological Oncology
Sheffield Teaching Hospitals NHS Trust
Sheffield, UK

Disclosures

Zilico Ltd
- Shareholder, Consultancy, Patent holder

Qiagen
- Speaker fee

Roche
- Speaker fee

Hologic
- Speaker fee

Sanofi-Pastuer
- Travel and conference fees

Highly relevant Clinical Disclosure

I have never performed ECC in over 30 years of colposcopic practice!

Problems with the data

You either do ECC or you don't

Most data is retrospective, small series from single institutions

No randomised controlled trials

Use of ECC may reflect lack of effective risk stratification of women attending colposcopy

As prevalence of high grade disease falls should you do more or less ECC?

Colposcopy in different populations

Multiple biopsy study of 690 women

- Colposcopic impression HG-CIN
  - LSIL cytology PPV = 32.2%
  - HSIL cytology PPV = 60.0%

Wentzensen et al 2015

Service review in Sheffield 2292 women with biopsy data

- Colposcopic impression HG-CIN
- Referred with HG cytology — PPV = 93.4%
- Referred with LG cytology — PPV = 54.9%
- Referred HPV 16/18 pos/cyto neg — PPV = 42.9%
- Referred HPV O pos/cyto neg — PPV = 35.0%

Why perform Endo-cervical Sampling (Curettage)?

- Increase detection of CIN – as part of a random biopsy approach
- Detection of CIN in women with type 3 TZ and no visible lesion including cervical stenosis
- Evaluation of resection margins at time of treatment for CIN
- Evaluation of resection margins at time of treatment for GCIN (AIS)

Increased detection of HG-CIN

Variety of trials - all retrospective small 165pts to large 18,537pts

Often unclear who had ECC and consistent application of criteria

Overall increased detection of HG-CIN 1.5% to 2.4%

Some studies report increased detection in women with high grade cytology, others report increased detection even in women with normal adequate colposcopy

Some conclude the need for all women 25+yrs need ECC

Increased detection of HG-CIN

Would most of this disease been detected as part of standard management - high grade cytology with inadequate colposcopy

Does a negative ECC have any predictive role in managing women with an inadequate colposcopic examination

ECC is painful

Poor agreement between ECC path and final excision pathology

Routine use of ECC is not cost effective

Management of positive margins at time of excisional treatment - CIN

Positive margins – lateral (deep) or endo-cervical are associated with higher rates of recurrent disease

Would a positive ECC alter your management

Over treatment – obstetric morbidity

2093 women treated by LLETZ (98% HG-CIN) – 34% positive margins – 37% had positive endo-cervical margins

All had cytology + hrHPV testing at 6 months – 22.7% of women with positive margins had a positive test either cytology or hrHPV

Management of positive margins at time of excisional treatment - CIN

At time of colposcopy only 14% of those who had a positive test had residual HG-CIN – not related to margin status. No cancers detected

Overall cure rate 98%

Test of cure at 6months post treatment with cytology and hrHPV testing is a sensitive method to detect residual CIN in women with positive margins

Management of positive margins at time of excisional treatment – CGIN (AIS)

ECC has variable performance in predicting residual disease

Meta-analysis 1278 women treated for CGIN (AIS)

Only one study found ECC to be superior to margin status in predicting residual disease

Risk of residual disease in women managed conservatively, 2.6% - negative margins, 19.4% - positive margins

Pathological review of 124 cases of AIS+ - no residual AIS if distance between last abnormal gland and margin >3mm

Conclusions

The role of ECC is poorly understood

No prospective data

Even in the larger retrospective studies no obvious group of women who have a higher detection rate of HG-CIN by ECC

Routine use of ECC detects 1-2% of ‘extra’ HG-CIN – but would the ECC result *per se* effect patient management?

ECC is painful and expensive

Conclusions

Positive margins are associated with residual HG-CIN but not predictive of residual disease

Conservative management with follow-up by cytology and hrHPV permits detection of residual disease and is less painful and cheaper

Conservative management of women post excision of HGCGIN (AIS) is more frequent

Disease free distance is a good predictor of residual disease

Cytology and hrHPV testing is likely to a sensible approach to detect residual disease

Conclusions

ECC was useful when women underwent ablative treatment with inadequate colposcopy

It is unclear if ECC increases detection of HG-CIN

There are better and less painful alternatives to ECC in predicting residual disease

The UK cervical screening programme has reduced the incidence of cervical cancer without ever using ECC