

Title:

A retrospective audit of LLETZ and cone procedures with comparison to best practice

Introduction:

In cervical cancer prevention, excisional cervical treatment facilitates histopathological examination and precise assessment of margin status in the management of precancerous lesions. Additionally, in fertile women, appropriate excision depth is required to reduce the risk of future preterm birth.

Adequate depth of excision is associated with reduced disease recurrence and should be congruent with current guideline recommendations based on transformation zone (TZ) determined at colposcopy.[1] Although the overall risk of excisional treatment is minimal, the excess risk of preterm birth is a key consideration. This is particularly important in women with excisions over 15mm depth where risk of both preterm and very preterm births are doubled.[2]

Aims:

To audit all excisional cervical procedures performed over the last year so as to identify areas for improvement, particularly in fertile aged women.

Methods:

A retrospective audit of all excisional treatments performed at the Mater Mother's Hospital, Brisbane between May 2020 and May 2021 was performed. TZ type, documented type of excision, histopathological depth, number of specimens, margin status and surgeon experience were reviewed.

Results:

186 excisional procedures were performed in the audit period. Specimen depth was appropriate for indicated excision type in 31% of cases. In fertile women with a type 1 TZ, 24% of excisions were too shallow and 42% too deep. Single-piece specimens were attained in 81% of cases and clear margins in 58%. Overall criteria for appropriate depth, single-piece specimen and margin status was met in 29% of cases with no difference in operator experience identified.

	Trainee (n=147)	Consultant (n=39)	p value
Depth >7mm	113 (77%)	28 (72%)	0.6543
Single piece	121 (82%)	29 (74%)	0.3736
All margins clear	82 (56%)	25 (64%)	0.4519
Meets ALL criteria	42 (29%)	12 (31%)	0.9439

Discussion:

This audit has identified multiple areas for improvement for excisional treatments. It has highlighted the need for strategies to improve outcomes to reduce recurrent disease and risk of preterm birth.

References:

1. Australia CC: National Cervical Screening Program: Guidelines for the management of screen-detected abnormalities, screening in specific populations and investigation of abnormal vaginal bleeding https://wiki.cancer.org.au/australia/Clinical_question:Colposcopy_and_treatment#Excision (2018). Accessed 23/07/2021 2021.
2. Castanon A, Landy R, Brocklehurst P, Evans H, Peebles D, Singh N, et al. Risk of preterm delivery with increasing depth of excision for cervical intraepithelial neoplasia in England: nested case-control study. *Bmj*. 2014;349.

