

Outcomes Following Excisional Cervical Treatments and Predictive Factors for Persistent Dyskaryosis: A Retrospective Study

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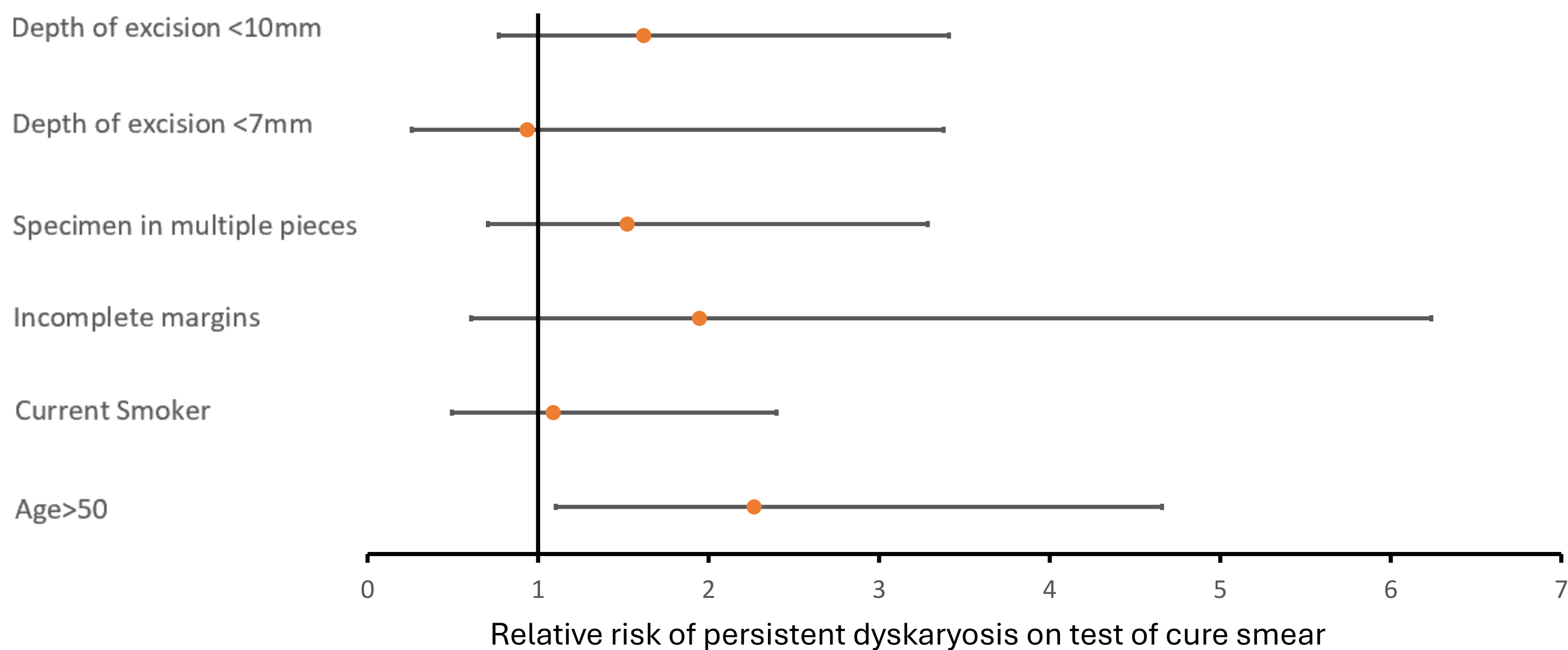
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Methods

We conducted a retrospective observational study using the colposcopy database at Barnet and Chase Farm Hospitals. Patients who underwent excisional cervical procedures between January and December 2023 were identified. A random sample of 100 cases was selected for analysis. Data collected included patient demographics, smoking status, procedural details (anaesthetic type, number of excision pieces, excision depth), histological outcomes, and cytology results on follow-up test of cure smear. Statistical analysis was performed to identify associations between clinical variables and the persistence of dyskaryosis.

Predictive factors for persistent dyskaryosis on test of cure smear

Age >50 years was identified as a significant risk factor for persistent dyskaryosis on the test of cure smear, with a relative risk of 2.267 (95% CI 1.103 to 4.658, P=0.0259). There was no significant association between smoking status, depth of excision, number of excisional pieces, or margin involvement with persistent dyskaryosis on test of cure smear.



Conclusion

Our findings suggest that age >50 years is a significant risk factor for persistent dyskaryosis on test of cure smear following excisional cervical treatment. These results may help guide counselling of patients undergoing excisional cervical treatments.

Introduction

Excisional cervical treatments are commonly used in the management of cervical intraepithelial neoplasia (CIN). Although these procedures are generally effective, a small proportion of patients experience persistent or recurrent high-grade disease following treatment, with reported rates ranging between 3.6% to 8.5%^{1–5}. Identifying factors predictive of persistent high grade cervical abnormalities is critical for improving patient counselling and follow up.

Aims of this study were:

- 1) To evaluate the outcomes following excisional cervical treatments performed at our unit
- 2) To identify predictive factors associated with persistent dyskaryosis on test of cure smear following treatment.

Results

Patient Demographics

The median age of patients was 40 (IQR 33-49). 31% of patients were current smokers.

Treatment Characteristics

The majority of procedures performed were large loop excision of the transformation zone (LLETZ) (92%), followed by laser cone biopsy (4%), knife cone biopsy (3%), and needle excision of the transformation zone (NETZ) (1%). General anaesthetic was used in 61% of cases. In 76% of procedures, the excised specimen was removed in a single piece. The depth of excision ranged from <7mm (10%), 7-10mm (29%), 11-15mm (36%), 16-20mm (19%) to >20mm (5%). Depth could not be determined in 1% of cases.

Histological Features

Endocervical and deep lateral margins were clear in 85% of cases. Final histology revealed cervical cancer in 3% of cases.

Test of cure results

Test of cure results, based on data available for 89% of patient were:

- Negative for high-risk HPV: 70.7%
- High-risk HPV positive, no dyskaryosis: 5.6%
- Borderline changes in squamous cells: 8.9%
- Low-grade dyskaryosis: 10.1%
- Moderate dyskaryosis: 3.4%
- Severe dyskaryosis: 1.1%

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