ADHERENCE TO THE TE WHATU ORA LAKES EPISTAXIS GUIDELINE IN ROTORUA EMERGENCY DEPARTMENT: A CLINICAL AUDIT

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1. BACKGROUND AND AIM

- Non-traumatic epistaxis is a common ED presentation and may lead to repeat presentations, discomfort and avoidable escalation.
- **Aim:** assess adherence to the Te Whatu Ora Lakes ED epistaxis guideline and identify practical implementation targets.

2. AUDIT STANDARD

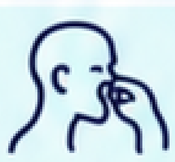
100% of eligible acute non-traumatic epistaxis presentations should receive documented stepwise management in accordance with the Te Whatu Ora Lakes Epistaxis Management in Emergency Department Guideline.

Adherence required:

- Direct pressure
- Clot aspiration/visualisation
- Topical vasoconstrictor/local anaesthetic with 5–10 minute wait
- Cautery if a bleeding point is seen
- Packing/escalation if bleeding continues or no source is identified
- Post-cautery antibiotic ointment/advice

ENT involvement in higher-risk cases, including unstable patients, posterior haemorrhage and bilateral packing.

3. GUIDELINE PATHWAY AUDITED



1 PRESSURE
Upright, head forward, firm anterior nasal pressure for 10 minutes.

2 ASPIRATE AND INSPECT
Aspirate clot, use headlight and suction to identify source.

3 TOPICAL AGENT
Co-phenylcaine and/or cotton wool with lignocaine 4% and adrenaline 1:1000. Wait 5–10 minutes.

4 CAUTERY IF SEEN
Silver nitrate if bleeding point visible. Do not cauterise both sides.

5 PACK / ESCALATE
If source not identified or bleeding persists, use anterior packing / Rapid Rhino. Use posterior Rapid Rhino and call ENT for posterior bleeding concerns. If cauterised, give antibiotic ointment for 1–2 weeks.

4. METHODS

- Retrospective clinical audit using block sampling from 01/07/24 to 29/06/25.
- **Included:** acute non-traumatic epistaxis as the primary presenting complaint.
- **Excluded:** traumatic or incidental epistaxis, self-discharge before treatment completion, out-of-period presentations.

5. COHORT / DEMOGRAPHICS

118 presentations identified	85 included in analysis	33 excluded

Mean age	55.9 years
Median age	66 years
Age range	1 – 92 years
Anticoagulant/antiplatelet use	45/85 (52.9%)

Ethnicity (Level 1 NZ coding)	
Māori	47/85 (55.3%)
European	30/85 (55.3%)
Asian	5/85 (5.9%)
Pacific Peoples	3/85 (3.5%)

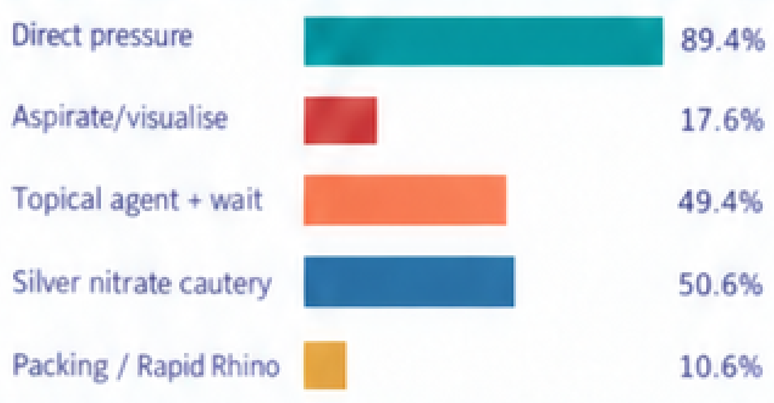
Bleed classification	
Anterior	80/85 (94.1%)
Posterior	1/85 (1.2%)
Equivocal / unclear	3/85 (3.5%)
Mixed anterior/posterior	1/85 (1.2%)

6. PRIMARY RESULT

42.4% 36/85 guideline adherence	57.6% 49/85 guideline not met

Initial assessment was documented in all included cases, but adherence fell at later hands-on steps.

7. STEPWISE MANAGEMENT DOCUMENTED



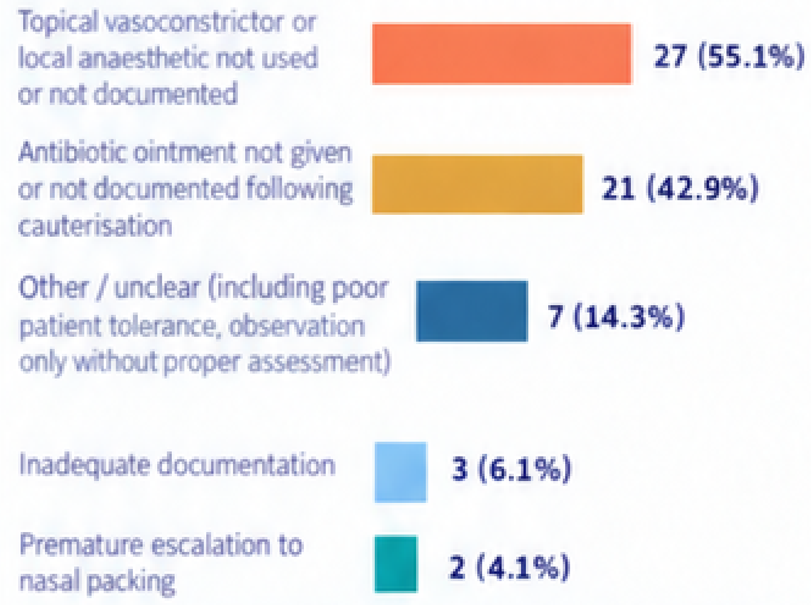
8. PACKING AND ESCALATION

Anterior packing / anterior Rapid Rhino	7/85 (8.2%)
Posterior Rapid Rhino	2/85 (2.4%)
ENT called overall	6/85 (7.1%)
Admission overall	8/85 (9.4%)
Of 9 packed patients, had ENT involvement	4/9 (44.4%)
Of 9 packed patients, were admitted	5/9 (55.6%)

9. POST-CAUTERY CARE

43 underwent cautery	22/43 (51.2%) advice + antibiotic ointment documented

10. REASONS GUIDELINE WAS NOT MET (n = 49)



Multiple reasons could apply.

11. REPEAT PRESENTATIONS

14.1% 12/85 non-expected 7-day re-presentation	58.3% 7/12 of re-presentations had not initially followed the guideline.

12. KEY FINDINGS

- Initial assessment was consistently documented.
- The guideline pathway was often started but not completed or documented.
- Major implementation gaps were clot aspiration / visualisation, topical agent use, and post-cautery ointment/advice.
- Packing was uncommon but associated with ENT involvement and admission.

13. RECOMMENDATIONS

- Print and laminate the existing guideline and place it on the ENT trolley.
- Reorganise the ENT trolley using a standard layout photo; ensure chloramphenicol ointment, lignocaine 4%, co-phenylcaine, cautery sticks and packing devices are present.
- Implement regular restocking checks.
- Provide brief staff education on access to and implementation of the guideline.
- Use simple documentation prompts.
- Re-audit after implementation.

14. CONCLUSION

The existing local guideline is appropriate, but adherence was limited by variable knowledge of the guideline, poor point-of-care access to it, and variable training in implementation.

Practical system changes should improve consistency of care.

15. ACKNOWLEDGEMENTS / REFERENCE

Thanks to the Rotorua ED SMO/RMO group and nursing staff involved in epistaxis care and ENT trolley maintenance.

Te Whatu Ora Lakes, Epistaxis Management in Emergency Department Guideline, 2021. G3117.