987 Protocol Driven Reduction of Haematoma Following Symptomatic Carotid Endarterectomy (CEA) – a Prospective Cohort Study

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**Aim:** Stroke is the third leading cause of death in developed nations and the leading cause of long-term disability. Carotid artery stenosis accounts for 20 to 30% of ischaemic strokes. Carotid Endarterectomy, has proven highly effective in preventing the development of strokes, TIAs and reducing death among patients with symptomatic carotid artery stenosis of 50–99%. The most common complication of CEA is wound haematomas. This study evaluates a protocol driven haemostasis pathway aimed to address the findings of a recent QI project that identified a significantly high neck haematoma rate as well as a high return to theatre rate for the complication.

**Method:** A prospective cohort outcome study between June 2019 and June 2020 was conducted, with the introduction of this stepwise pathway introduced as a quality improvement measure.

- Patch haemostasis ensured with attention to bleeding points.
- 10 minutes light compression applied – activated clotting time checked/ protamine given if required.
- 10 minutes post protamine - 1 g tranexamic acid administered if needed.
- If bleeding persists after 10 minutes, discussed with haematology / platelet transfusion.

This was implemented at the end of successful patch closure, for each CEA.

**Results:** Post-CEA haematoma rates decreased from 7% to 3.6%. Return to theatre rates reduced from 6% to 0.9% with no increase in peri-operative stroke rates.

**Conclusion:** Our protocol appears to reduce post-CEA haematoma rates. Return to theatre rates had also dropped without an increase in peri-operative stroke rates despite using protamine and tranexamic acid when needed.