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Background

- Regional Australians, particularly those in remote areas, are 19% more likely to suffer a stroke compared to urban. Distance and resources limits diagnosis/treatment within the 4.5 hour window for thrombolysis.
- The Stroke Foundation postulates that no stroke should be untreated.
- Thrombectomy** is the standard of care in the treatment of large vessel occlusion stroke.
- Suitable time frame for thrombectomy may be up to 24 hours.
- The NT is one of two states in Australia without endovascular clot retrieval, and the greatest distance for some of the population to reach tertiary medical care.
- CareFlight's Northern Operations provides integrated high acuity medical retrieval service for over 3000 patients a year in the Top End of Australia. This is the first study to look at the disease burden and effect on the population covered by CareFlight in the NT.

Study Aims

- To assess the *numbers* and *time-metrics* of stroke retrievals undertaken by CareFlight in the NT
- To assess subsequent hospital treatment
 - Thrombolysis
 - Transfer to endovascular retrieval centre
 - Neither



Methods

- Retrospective audit of the CareFlight mission database (Sept 2015- Sept 2019) to assess patients retrieved with a possible cerebrovascular accident to Royal Darwin Hospital.
- Retrospectivize audit of the interventions received by these patients at Royal Darwin Hospital, and whether transferred further for endovascular clot retrieval.

Results

Over four years:

- 185 patients identified with a possible cerebrovascular event on initial contact
- 2hrs 22min was the average time from notification to first patient contact
- 60 patients identified with ischaemic stroke on investigation
- 2 patients arrived in hospital within the 4.5hr window necessary for thrombolysis
- 37 patients arrived in hospital within 24hrs of symptom onset
- 27 days average inpatient stay in this patient group
- 0 patients had thrombolysis or referral for thrombectomy elsewhere

Conclusion

- Over four years, no hyperacute reperfusion treatment performed for ischaemic stroke patients.
- 30% of patients identified with symptoms of a CVA were confirmed to have an ischaemic stroke on investigation.
- Significant length of hospital stay within this patient group.

References

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