Up-to-date data on the proportion of patients with ischemic stroke undergoing revascularization procedures. Insights from a population-based registry

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OBJECTIVE

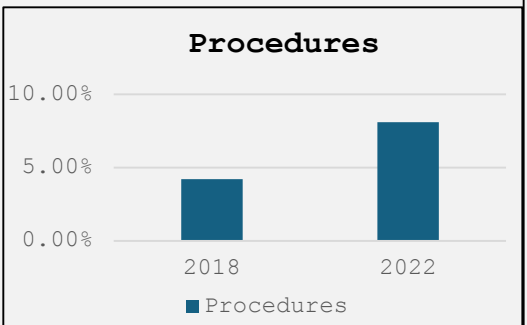
The aim of the study is to provide an updated report on the proportion of revascularization procedures performed in a real-world setting on patients with ischemic stroke

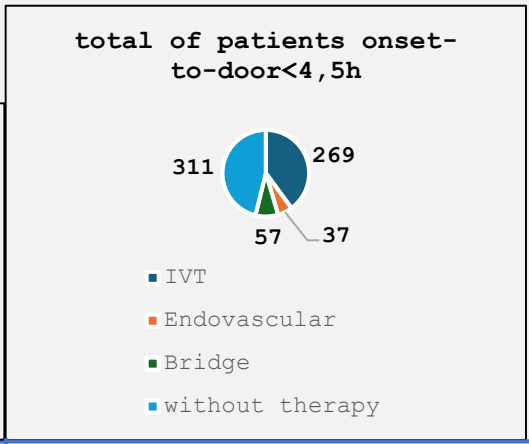
METHODS

We included consecutive patients with ischemic stroke from the prospective population-based registry of the district of L'Aquila, Italy. The study included all individuals residing in the district and undergoing acute cerebrovascular events since 2011. Patients were included from medical records, emergency medical services, general practitioners, and death certificates. For the present study, we recorded the number and proportion of patients treated with revascularization procedures over the total of patients with ischemic stroke, from 2018 to 2022. We also reported yearly trends in the proportions of revascularization procedures

RESULTS

Over the study period, we recorded 969 patients with ischemic stroke, 69.6% of whom had an onset-to-door time of <4.5 hours from symptom onset, whom:
-269 patients (28.1%) were treated with intravenous thrombolysis, while:
-37 (3.9%) were treated with primary endovascular procedures;
-57 (5.9%) were treated with combined revascularization procedures.
The proportion of patients treated with combined revascularization procedures doubled from 4.2% in 2018 to 8.1% in 2022 (p<0.001) while other procedures showed no clear trend over the years. The frequent reason to not perform revascularization procedures was the onset-to-door time, being >4.5 hours in 30.3% of patients.





DISCUSSION

Providing up-to-date data on the proportion of patients with ischemic stroke treated with revascularization strategies in recent years is important to check the quality of assistance on specific territories and plan strategies for improvement of stroke care.
Our data do not overlap with those obtained from a less recent study (from 2013 to 2014) showing that IVT procedures account for 20%, while EVT procedures come in at 11%.
A possible explanation of our findings is that in recent times the proportion of patients undergoing revascularization procedures increased as a result of an improvement in patient transportation.

CONCLUSION

Our results suggest that the proportion of patients with ischemic stroke undergoing revascularization procedures is high in recent times. Awareness should be increased to implement new acute stroke care units and decrease patients' transportation times.

REFERENCES

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Eligibility and Predictors for Acute Revascularization Procedures in a Stroke Center

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