

1-2020

## Rescue stenting for failed mechanical thrombectomy procedures

Joseph Schaefer

*Thomas Jefferson University, joseph.schaefer@jefferson.edu*

Ahmad Sweid, MD

*Thomas Jefferson University, ahmad.sweid@jefferson.edu*

M. Reid Gooch, MD

*Thomas Jefferson University, michael.gooch@jefferson.edu*

Pascal Jabbour, MD

*Thomas Jefferson University, Pascal.Jabbour@jefferson.edu*

Follow this and additional works at: [https://jdc.jefferson.edu/si\\_dh\\_2022\\_phase1](https://jdc.jefferson.edu/si_dh_2022_phase1)



Part of the [Neurology Commons](#), and the [Surgery Commons](#)

[Let us know how access to this document benefits you](#)

---

### Recommended Citation

Schaefer, Joseph; Sweid, MD, Ahmad; Gooch, MD, M. Reid; and Jabbour, MD, Pascal, "Rescue stenting for failed mechanical thrombectomy procedures" (2020). *Phase 1*. Paper 5.

[https://jdc.jefferson.edu/si\\_dh\\_2022\\_phase1/5](https://jdc.jefferson.edu/si_dh_2022_phase1/5)

This Article is brought to you for free and open access by the Jefferson Digital Commons. The Jefferson Digital Commons is a service of Thomas Jefferson University's [Center for Teaching and Learning \(CTL\)](#). The Commons is a showcase for Jefferson books and journals, peer-reviewed scholarly publications, unique historical collections from the University archives, and teaching tools. The Jefferson Digital Commons allows researchers and interested readers anywhere in the world to learn about and keep up to date with Jefferson scholarship. This article has been accepted for inclusion in Phase 1 by an authorized administrator of the Jefferson Digital Commons. For more information, please contact: [JeffersonDigitalCommons@jefferson.edu](mailto:JeffersonDigitalCommons@jefferson.edu).

**Title:** Rescue stenting for failed mechanical thrombectomy procedures.

**Authors and Affiliations:**

Joseph Schaefer, Thomas Jefferson University Hospital

Ahmad Sweid, MD, Thomas Jefferson University Hospital\*

Reid Gooch, MD, Thomas Jefferson University Hospital

Pascal Jabbour, MD, Thomas Jefferson University Hospital

*\*SI Advisor*

**Background:** Mechanical thrombectomy (MT) has dramatically changed the natural history of acute ischemic stroke. The disease that was associated with high morbidity, mortality, and significant cost on the health care system became a treatable disease. One of the most important variables to improve outcomes is time to revascularize the ischemic tissue. Rescue stenting (RS) is an option for patients who fail MT.

**Methods:** A retrospective chart review for patients who underwent a MT procedure and either failed (defined as TICI 0-2a) or required a RS from 2015 – 2019 composed the study population. IRB approval was obtained and the consent was waived due to the study design. Medical charts and imaging were reviewed for baseline characteristics, stroke characteristics, complications, and functional outcome. Comparison was performed between the rescue group and the failed group to analyze outcomes.

**Results:** From 2015-2019, 96 patients failed a MT procedure, and 26 patients required an intracranial stent. Initial NIHSS scores were comparable between the groups, ( $16.1 \pm 7.2$  vs.  $15.2 \pm 8.0$ ,  $p = 0.552$ ). Patients received comparable pre-procedure care as indicated by similar rate of tPA administration ( $38.5\%$  vs.  $34.6\%$ ,  $p = 0.804$ ) and symptom onset to procedure time

( $1043.5 \pm 3556$  vs.  $1505.3 \pm 5183$ ,  $p = 0.652$ ). While receiving an intracranial stent led to a longer procedure time ( $66.1 \pm 43.4$  vs.  $86.6 \pm 36.2$ ,  $p = 0.040$ ), patients receiving a stent had a reduced mortality (32 (36.0%) vs. 3 (12.0%),  $p = 0.027$ ) and NIHSS at discharge ( $23.0 \pm 14.7$  vs.  $14.5 \pm 13.6$ ,  $p = 0.034$ ). In the RS group, 4 patients had symptomatic intracranial hemorrhage as opposed to 2 in the non-RS group (3.6% vs 15.4%,  $p = 0.08$ ).

**Conclusion:** Rescue stenting was associated with good outcomes as indicated by decreased mortality and NIHSS at discharge.