

Initial Clinical Experience with the ADAPT Technique: A Direct Aspiration First Pass Technique for Stroke Thrombectomy.

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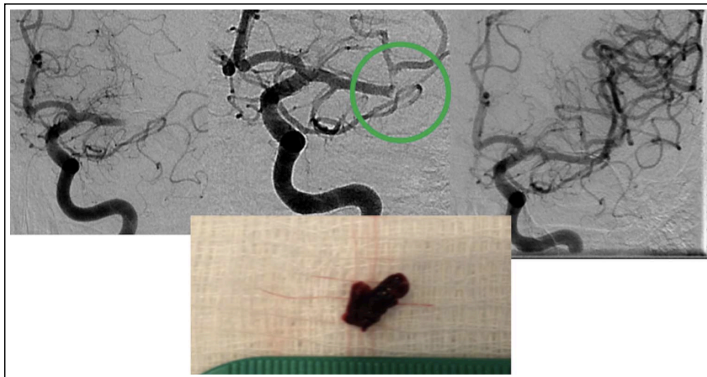
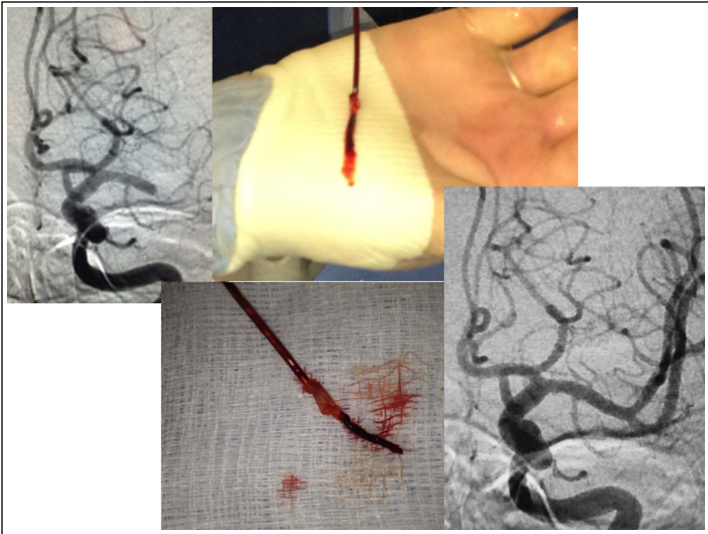


Introduction

The development of new revascularization devices has improved recanalization rates and time, but not clinical outcomes. We report our initial results with a new technique utilizing a direct aspiration first pass technique with large bore aspiration catheter as the primary method for vessel recanalization.

Methods

A retrospective evaluation of a prospectively captured database of 37 patients at 6 institutions was performed on patients where the ADAPT technique was utilized. The data represents the initial experience with this technique.



Results

The ADAPT technique alone was successful in 28 of 37 (75%) cases, although 6 cases had large downstream emboli that required additional aspiration. Nine cases required the additional use of a stent retriever and one case required the addition of a Penumbra aspiration separator to achieve recanalization. The average time from groin puncture to at least TIC1 2b recanalization was 28.1 minutes and all cases were successfully revascularized. TIC1 3 recanalization was achieved 65% of the time. On average, patients presented with an admitting NIHSS of 16.3 and improved to NIHSS of 4.2 by the time of hospital discharge. There was one procedural complication.

Conclusions

The ADAPT technique was found to be significantly faster and more efficacious than our previous published thrombectomy experience or any series reported in the literature. Employing this technique, acceptable recanalization (>TIC1 2b) was achieved in all patients, as fast as 7 minutes from groin puncture. The rate of TIC1 3 recanalization was also noted to be significantly better than any previously reported.

