

## Radial access mechanical thrombectomy: A case series

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### Abstract

Cardiologists have been preferentially using Trans-radial access (TRA) for many years now and have demonstrated its safety in comparison to trans-femoral access (TFA). The uptake of TRA by neurointerventionalists has been slow but recent literature has shown that it is safe.

In our centre we have started using TRA for neurovascular procedures and here we present our initial experience with three cases of mechanical thrombectomy:

Case 1: 58-year-old male presenting with sudden onset left-sided neck pain, with left arm weakness, dizziness and vomiting. CTA showed left vertebral artery dissection with basilar artery occlusive thrombus. Access achieved through the right radial artery and successful recanalization achieved with a single pass.

Case 2: 75-year-old male, with sudden onset collapse following intermittent dizziness and left arm weakness throughout the day. Initial CT head showed no abnormalities. Overnight GCS dropped to 4/15, with up going plantars and fixed dilated left pupil. Repeat CT/CTA showed bilateral thalamic infarcts, left cerebellar infarct and basilar artery thrombus. Thrombectomy performed with right radial artery access, successful recanalization with single pass.

Case 3: 45 year old male with sudden onset hemianopia and confusion. CTA showed left proximal PCA thrombus. Right radial access used to perform thrombectomy, successful recanalization with single pass.

Conclusion and Significance-All the above procedures were performed with no significant time delay in comparison to TFA. Further, there were no complications. Our initial experience has demonstrated that mechanical thrombectomy via TRA can be performed safely, effectively and with few access site complications, where anatomical and procedural considerations allow

### References:

1. Chen SH, Snelling BM, Sur S, et al. Transradial versus transfemoral access for anterior circulation mechanical thrombectomy: comparison of technical and clinical outcomes. *Journal of NeuroInterventional Surgery* 2019;11:874-878.
2. Furlan AB, Joshi KC, Munich SA. Radial access for acute stroke thrombectomy: The case for using transradial access in neurointervention. *Endovascular Today* 2020;19(2):66-68.
3. Sur S, Snelling BM, Khandelwal P et al. Transradial approach for mechanical thrombectomy in anterior circulation large-vessel occlusion. *Neurosurg Focus* 2017;42:1-4.
4. Khanna O, Mouchtouris N, Sweid A, et al Transradial approach for acute stroke intervention: technical procedure and clinical outcomes. *Stroke and Vascular Neurology* 2020;5:doi: 10.1136/svn-2019-000263
5. Mizokami T, Uwatoko T, Furukawa T et al. Transradial approach for mechanical thrombectomy of posterior circulation stroke. *Journal of neuroendovascular therapy* 2018;12:314-319.
6. Oselkin M, Satti SR, Sundararajan SH et al. Endovascular treatment for acute basilar thrombosis via a transradial approach: Initial experience and future consideration. *Interventional Neuroradiology* 2018; 24(1): 64-69.

### Bottom Note:

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