

# Efficacy of the trans-jugular approach in the endovascular intervention for hemodialysis access

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## Introduction

Compared with the conventional approach, the benefits of the transjugular approach in endovascular intervention for hemodialysis (HD) access avoids complications due to direct puncture and reduces radiation exposure. The aim of this non-inferiority study was to evaluate the efficacy of the transjugular approach in endovascular intervention for HD access comparing with conventional approach.

## Methods

296 cases in 149 patients

- Concurrent interventions (transjugular + conventional)
- Interventions with operation
- Maturation failure
- Main lesions located in the central vein

223 cases in 118 patients  
(146 conventional vs 77 transjugular)

- Retrospectively assessed medical information
- From 2012 to 2016

Conventional approach group

vs

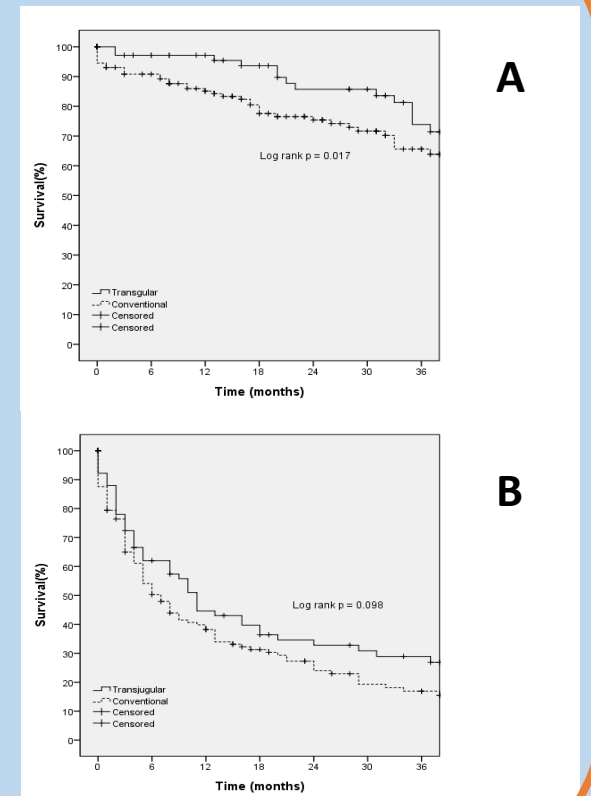
Transjugular approach group

- Outcomes
  1. HD access survival rate
  2. Re-intervention survival rate

## Results

1. There was no significant difference between the two groups according to the vascular access type ( $p = 0.130$ ).
2. The HD access survival rate was greater with the use of the transjugular approach than with the conventional approach ( $p = 0.017$ ) (Fig. A)
3. The re-intervention survival rate was not significantly different but showed a trend toward improved outcomes in the transjugular approach group ( $p = 0.098$ ) (Fig. B)

	Conventional (N=146)	Transjugular (N=77)	P value
Age	68.3 ( $\pm$ 11.0)	69.8 ( $\pm$ 10.8)	0.320
Gender (male)	75 (51.4%)	31 (40.3%)	0.123
Follow up period(month)	23.6 ( $\pm$ 18.8)	30.1 ( $\pm$ 22.4)	0.033
Vascular access type			0.130
Location of main lesion			0.465



## Conclusions

The transjugular approach should be an alternative to either replace or use in combination with the conventional approach in endovascular intervention for HD access.

