



Embedded catheters can be successfully managed by endoluminal dilatation with minimal complications and factors associated with embedding include dwell times > 2 years and/or with a history of central venous stenosis” Talreja et al (2017).

Abstract:

**BACKGROUND:** With the increasing frequency of tunneled hemodialysis catheter use there is a parallel increase in the need for removal and/or exchange. A small but significant minority of catheters become embedded or ‘stuck’ and cannot be removed by traditional means. Management of embedded catheters involves cutting the catheter, burying the retained fragment with a subsequent increased risk of infections and thrombosis. Endoluminal dilatation may provide a potential safe and effective technique for removing embedded catheters, however, to date, there is a paucity of data.

**OBJECTIVES:** 1) To determine factors associated with catheters becoming embedded and 2) to determine outcomes associated with endoluminal dilatation.

**METHODS:** All patients with endoluminal dilatation for embedded catheters at our institution since Jan. 2010 were included. Patients who had an embedded catheter were matched 1:3 with patients with uncomplicated catheter removal. Baseline patient and catheter characteristics were compared. Outcomes included procedural success and procedure-related infection. Logistic regression models were used to determine factors associated with

embedded catheters.

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RESULTS: We matched 15 cases of embedded tunneled catheters with 45 controls. Among patients with embedded catheters, there were no complications with endoluminal dilatation. Factors independently associated with embedded catheters included catheter dwell time (> 2 years) and history of central venous stenosis.

CONCLUSION: Embedded catheters can be successfully managed by endoluminal dilatation with minimal complications and factors associated with embedding include dwell times > 2 years and/or with a history of central venous stenosis.

Reference:

Talreja, H., Ryan, S.E., Graham, J., Sood, M.M., Hadziomerovic, A., Clark, E. and Hiremath, S. (2017) Endoluminal dilatation for embedded hemodialysis catheters: A case-control study of factors associated with embedding and clinical outcomes. PLoS One. 12(3), p.e0174061. eCollection 2017.

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