Abstract

Long Term Hemodialysis Vascular Access in Patients with Central Venous Stenosis: Need to Explore a New Site

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Introduction:
Vascular access remains the mainstay for the survival of long term hemodialysis (HD) patients. In spite of advances in our understanding of the problems of central venous stenosis, we continue to get patients with multiple levels of central venous stenosis (CVS). Even though AV fistula remains the preferred route for chronic HD, there are situations where one is forced to use tunneled cuff catheters (TCC) as the only possible access. Traditionally, one uses right or left internal jugular veins for TCC. Use of subclavian veins for TCC has almost been given up. Inferior vena cava (IVC) catheter placements are possible but they have their own problems.

Aim:
Is it possible to use any other vein for a long term reliable vascular access with TCC in a safer position?
We had series of 5 patients where we faced this dilemma. The patient demographics were as follow: (Material, method, results)

Patient number	Age in years	Sex	Original disease	Period on dialysis	Levels of CVS	Site of successful TCC	Type of TCC	Survival of catheter	Problems during insertion
1	42	F	CGN	10 years	Both IJV, both SCV, left brachicephalic vein, both external iliac veins	Right EJV*	Palindrome	340 days	None
2	46	F	DKD	7 months	Both IJV, both SCV, left brachiocephalic veins	Right EJV	Pallindrome	200 days	none
3	67	M	DKD	7 days	Right IJV	Right EJV	Pallindrome	100 days	Kinking of catheter requiring re-exploration
4	50	F	CTID	1 year	Both IJV	Right IJV	Pallindrome	60 days	IJVs found blocked, though MR venogram had reported them to be patent
5	60	M	DKD	13 months	Both IJV and left brachio-cephalic	Right IJV	Pallindrome	180 days	None

Legend: EJV: external jugular vein, IJV: internal jugular vein, SCV: subclavian vein
*Previous failed right trans-femoral TCC, after right external iliac vein plasty

All the patients will be discussed briefly as each one had a unique problem.

Conclusion:

The purpose of this presentation is to emphasize the fact that EJV can easily be used for placements of long term cuffed tunneled HD catheters when IJVs and subclavian veins have thrombosed. EJV may be a better option than IVC placements of cuffed tunneled catheters.