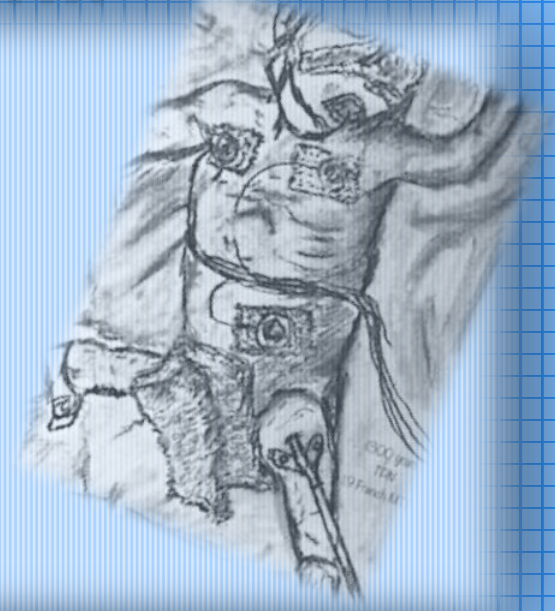


The Relevance of the Location of the Exit Site and the Role of Tunneling



GAVeCeLT
Gli Accessi Venosi Centrali a Lungo Termine

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Disclosures

- 1) Vascular Access Coordinator for St Joseph's University Health, USA***
- 2) Speaker: 3M, B Braun, Adhezion Biomedical, Teleflex, Vygon***
- 3) This speaking session was sponsored by GAVeCeLT***
- 4) Off Label: YES. Labels are for industry, Assessments are for patients***

Objectives

- 1) Present the traditional bedside vascular access model in the USA***
- 2) Define the multi-disciplinary vascular access model***
- 3) Illustrate examples of tunneling to the Jugular, Axillary and Femoral veins in both pediatrics and adults***
- 4) Discuss new device recommendations when implementing tunneling***

Future Bedside Vascular Access Model



PIV/PICC

RN



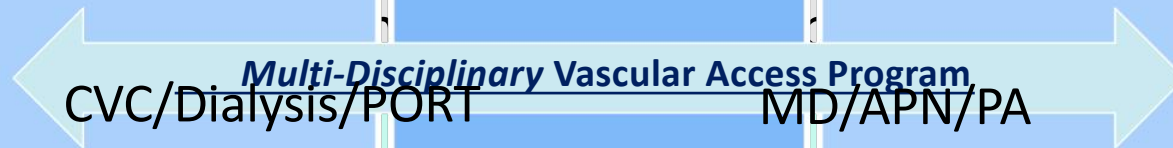
Tunneled/Non
Tunneled CVC

APN/PA/MD



Portacath

APN/PA/MD



Tunneling

Tunneling is defined as an brining a device from one site to another subcutaneously.

Clinicians are tunneling with the traditional metal tunneler in which there are two puncture sites (the entry and exit)

An angiocath then pulling the catheter through (entry and exit site)

Creating short subcutaneous tracks of up to 6cm with the insertion needle.

A modified seldinger technique from the intended exit site to the insertion site using a needle, guide wire and sheath.

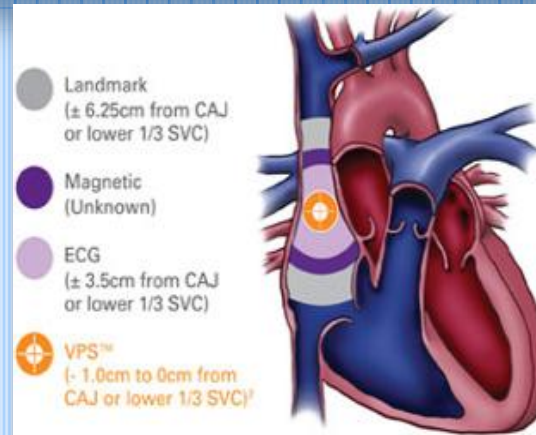
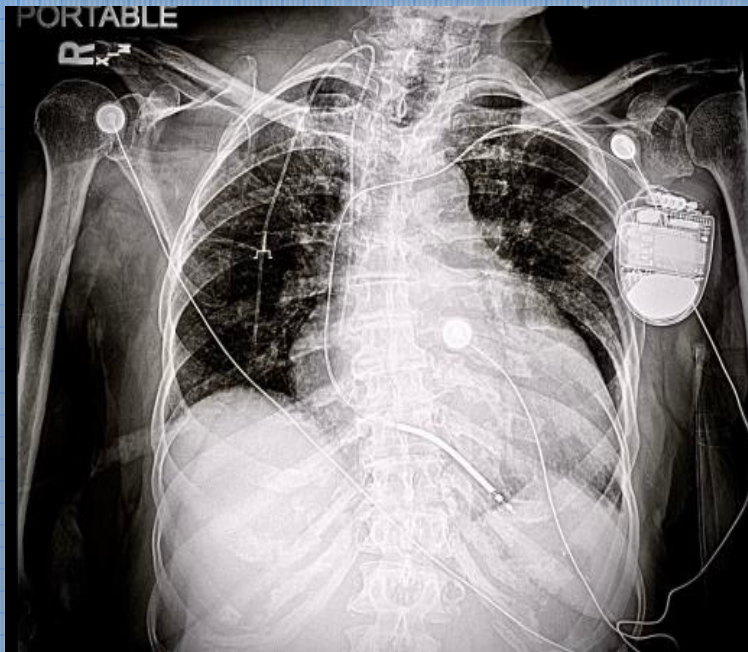
Traditionally cuffed catheters were used to provide tissue adherence for securement but now we are able to replace this in some instances with subcutaneous securement.

In the US tunneling is reserved for Advance Practice Nurses in a Interventional Radiology setting and of course physicians and surgeons.

We are finding that Advanced Practice nurses can not only perform more invasive and complex procedures, but they can bill.

I personally have been able to demonstrate over \$250,000 dollars this year in professional billing and the volume continues to rise.

Tip Navigation SVC/IVC



Bedside Tunneling of PICC lines

Bedside tunneling of PICC lines has been well described and demonstrated for years by Dr. Pittiruti in the United States. Nurses in our country have struggled with this technique strictly due to scope of practice which is where adaptations such as subcutaneous needle tunneling was implemented.

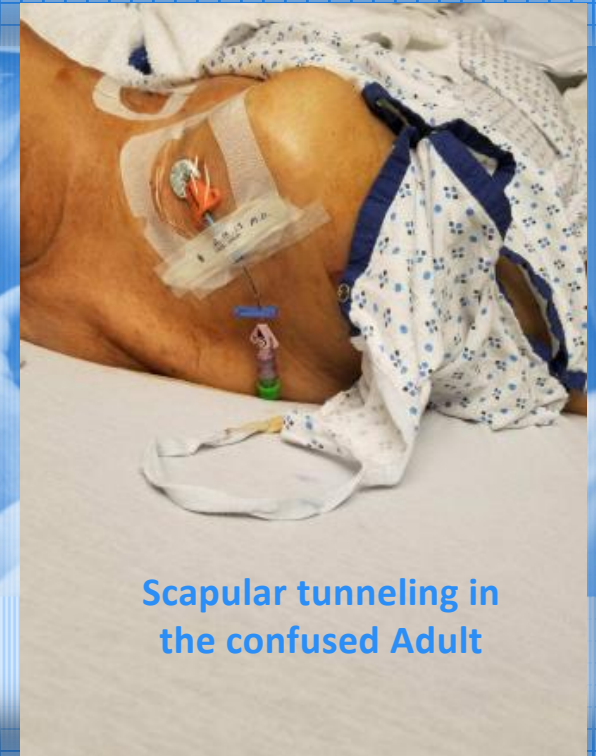


Jugular Tunneling



Traditional Jugular Tunneling
to the Chest

Mid Thoracic Tunneling in
Pediatrics



Scapular tunneling in
the confused Adult

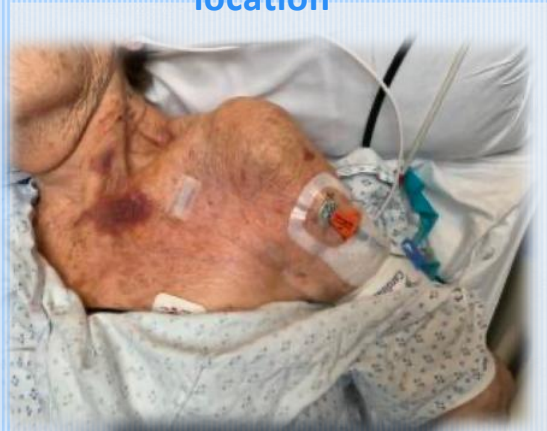


Axillary Tunneling



Traditional Tunnel

Tunneled Axillary to "PICC" location



Double Tunnel

Axillary to the Back



Jugular and Axillary Tunneling

Jugular

Axillary



Femoral Tunneling



Adopt the Mid Thigh Femoral
CVC as a Standard of Care

All Tunneled CVC's
provided at the
bedside



Tunneled to the hip

Dedicated NICU low
birth weight specialist



Tunneling Recommendations

<i>Tunneled PICC</i>	<i>Tunneled Jugular</i>	<i>Tunneled Axillary</i>	<i>Tunneled FICC</i>
Achieve Green Zone Insertion	1. Osteomyelitis 2. Endocarditis 3. Long Term TPN 5. Long Term Inotropy Therapy 6. Long Term Antibiotics on Renal/Dialysis	1. Contracted 2. Long Term Antibiotics	1. Contraindication to upper extremity/thoracic/ cervical insertion 2. Multiple supra-diaphragmatic devices 3. Preservation of cervical or thoracic sites
	<i>Jugular/Axillary to Scapula</i>	<i>Axillary to Arm</i>	<i>Femoral to Abdomen/Hip</i>
	1. Alteration in Mentation 2. Cognitive Developmental Risk for removal 3. Contraindication to thoracic exit site	1. Contracted with sub-optimal thoracic region 2. Cachectic non mobile	1. Contraindication to thoracic insertion with: loose stools, mobile, surgical site, high AKA

THANK YOU FOR YOUR ATTENTION



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