

TIPS AND TRICKS FOR PICC-Port IMPLANT

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TIPS AND TRICKS FOR PICC-Port IMPLANT



Totally implantable vascular access devices (TIVAD-Port) continue to be extremely popular in medical practice in particular for long-term drug therapy delivery of cancer patients candidate to chemotherapy.

SRENGTHS of TIVADs

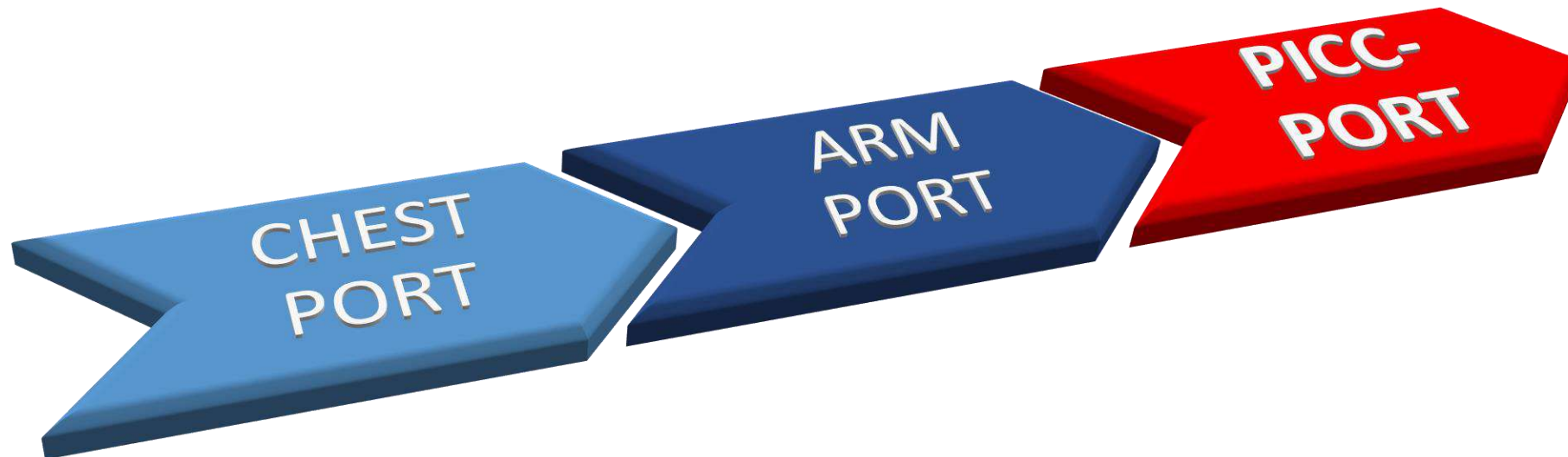
- **SAFETY AND EFFICACY**
- **LONG DURATION**
- **LOW MAINTENANCE**
- **LOW NURSING EXPENDITURES**

WEAKNESS OF TIVADs

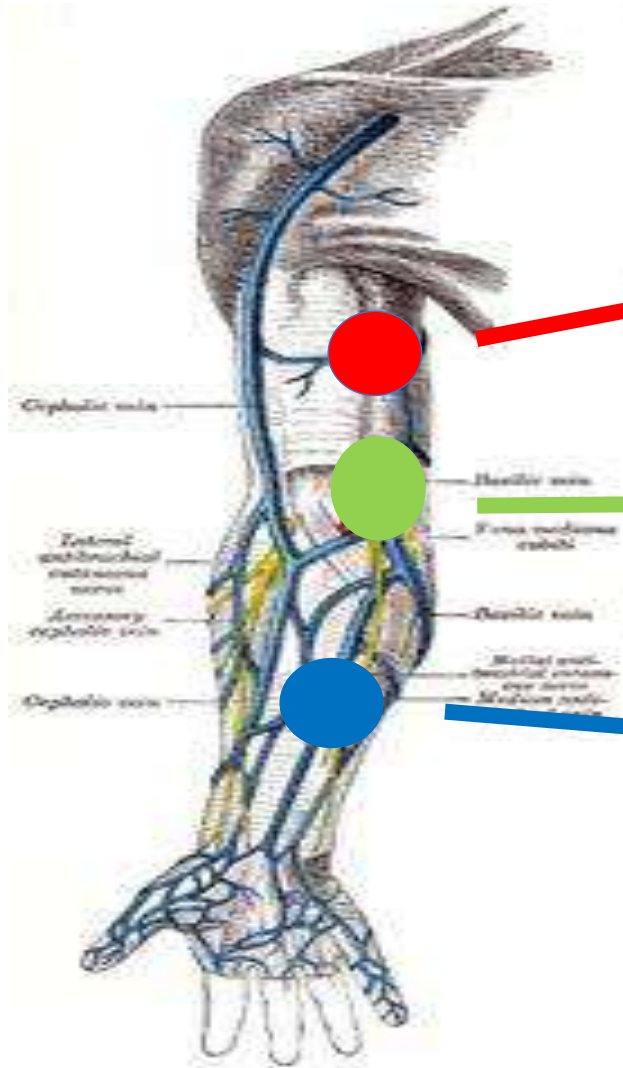
- **INVASIVE PROCEDURE**
- **COSTS OF IMPLANT**
- **LOGISTIC DIFFICULTIES**
- **PATIENTS' COMPLIANCE**

REDUCING INVASIVENESS, IMPROVING RESULTS AND
PATIENTS' COMPLIANCE OF PORTS

THE PICC-Port TECHNIQUE
A FIFTEEN-YEARS EVOLUTION PROCESS



PICC –Port is a TIVAD inserted at the proximal 1/3rd of the arm by micro-Seldinger US guided technique, similar to that used for PICC insertion, with the chamber located in the subcutaneous tissue of the mid-arm



PICC-Port

ARM / BRACHIAL PORT

FOREARM PORT

PICC-Ports DIFFERENCES WITH ARM PORTS

UNIQUE CHARACTERISTICS OF PICC-Port

- 1- Used for vein cannulation at the proximal 1/3rd of the upper arm
- 2- US-guided and non invasive micro-Seldinger insertion technique
- 3- Respect of safe protocols of insertion as for PICCs(GAVeCeLT SIP protocol)

THE PICC-Port LINKS TOGETHER PICC 's AND TIVAD 's
IMPLANT TECHNIQUE

J Vasc Access. 2020 Jul;21(4):460-466
Original research article

PICC-PORT totally implantable vascular access device in breast cancer patients undergoing chemotherapy

Sergio Bertoglio^{1,2}, Ferdinando Cafiero², Paolo Meszaros³, Emanuela Varaldo^{1,2}, Eva Blondeaux⁴, Chiara Molinelli⁴ and Michele Minuto^{1,2}

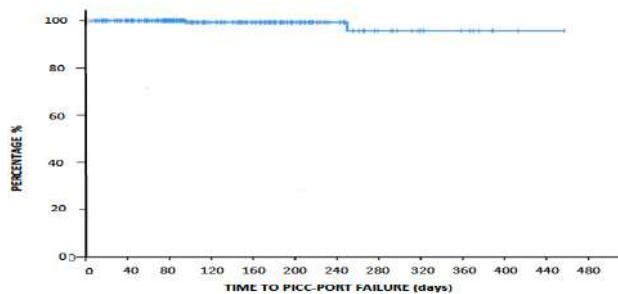


J Vasc Access . 2022 Jan 17;11297298211067683

Original research article

A multicenter retrospective study on 4480 implanted PICC-ports: A GAVeCeLT project

Sergio Bertoglio^{1,2}, Maria Giuseppina Annetta³, Fabrizio Brescia⁴, Alessandro Emoli⁵, Fabio Fabiani⁴, Maria Fino⁶, Domenico Merlicco⁶, Andrea Musaro⁷, Marina Orlandi⁸, Laura Parisella⁴, Fulvio Pinelli⁸, Simona Reina², Valentina Selmi⁸, Nicola Solarì², Fausto Tricarico⁹ and Mauro Pittiruti¹⁰



The proportion of patients without device failure was 99.8% (95%CI, 95–99%).

CLINICAL OUTCOMES OF PICC-Ports

CRT	1.3-2.4%
CRBSI	0.6-1%
LOCAL INFECTION	0.2-0.4%
FAILURE AND AVULSION	1.2-2.2%

SIMILAR CLINICAL OUTCOMES OF STANDARD CHEST PORTS AND BETTER RESULTS WHEN COMPARED TO ARM PORTS

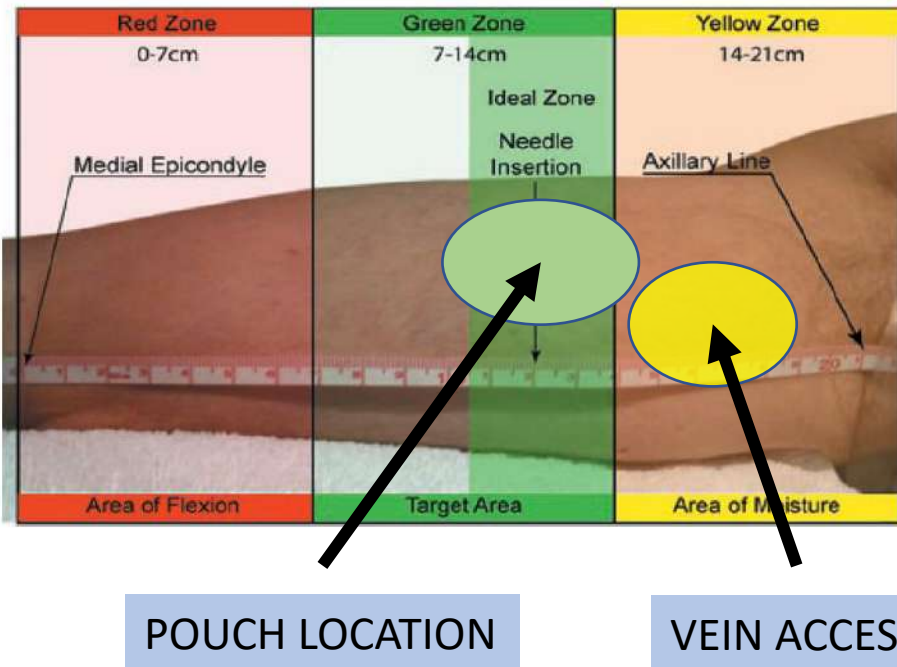
IMPORTANT TIPS AND TRICKS FOR IMPLANTED PICC-Port SUCCESS

- 1. SITE OF VEIN ACCESS AND POUCH LOCATION**
- 2. POUCH SURGICAL TECHNIQUE**
- 3. SKIN CLOSURE**
- 4. USE OF GLUE**
- 5. CHOOSING THE RIGHT LENGTH OF NON-CORING NEEDLES**
- 6. PICC-PORT RETRIEVAL**

IMPORTANT TIPS AND TRICKS FOR IMPLANTED PICC-Port SUCCESS

1. SITE OF VEIN ACCESS AND POUCH LOCATION

ZONE INSERTION METHOD (ZIM)



- **ACCESSED VEIN SHOULD RESPECT A CATHETER TO VEIN RATIO $\leq 1/3^{\text{rd}}$**
- **POUCH MUST BE PERFORMED OVER THE INNER MEDIAL FASCIA OF THE BICEPS AWAY FROM VASCULO-NERVOUS BUNDLE**

IMPORTANT TIPS AND TRICKS FOR IMPLANTED PICC-Port SUCCESS

1. SITE OF VEIN ACCESS AND POUCH LOCATION

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Port positioning with tunnellization

IMPORTANT TIPS AND TRICKS FOR IMPLANTED PICC-Port SUCCESS

2. POUCH SURGICAL TECHNIQUE

Reduced surgical incision, blunt dissection and avoid electrocoagulation unless essential



IMPORTANT TIPS AND TRICKS FOR IMPLANTED PICC-Port SUCCESS

3. SKIN CLOSURE

Absorbable suture



IMPORTANT TIPS AND TRICKS FOR IMPLANTED PICC-Port SUCCESS

4. USE OF GLUE

N-Butyl Cyanoacrylate preferable



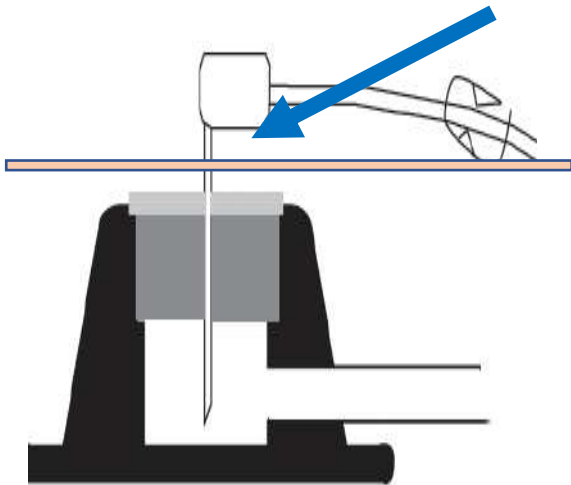
MeriGlu Topical Skin Adhesive

MERIGLUTM
N-Butyl Cyanoacrylate

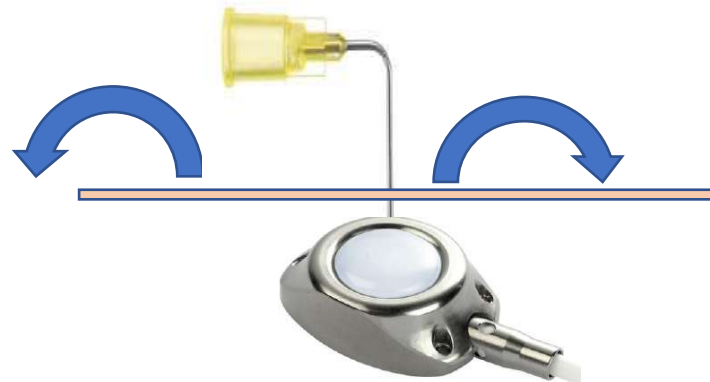
IMPORTANT TIPS AND TRICKS FOR IMPLANTED PICC-Port SUCCESS

5. CHOOSING THE RIGHT LENGTH OF NON-CORING NEEDLES Needle lengths 15mm to 25 mm ranges are recommended

REDUCED SPACE BETWEEN SKIN AND NEEDLE PROXIMAL HUB



REDUCED NEEDLE TILTLING AND INADVERTANT NEEDLE DISPLACEMENT



SAFER ACCESS PORT NEEDLE STABILIZATION

IMPORTANT TIPS AND TRICKS FOR IMPLANTED PICC-Port SUCCESS

6. PICC-PORT RETRIEVAL SURIGICAL TECHNIQUE

Same technique as used for removing the thoracic ports



IMPORTANT TIPS AND TRICKS FOR IMPLANTED PICC-Port SUCCESS

  **What** I have
  **Learned**



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