

Ultrasound-guided PICC ports, CICC Ports FICC Ports: Indications

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Dis





Indications

Why VADs in general?

Because...













- Why PICC PORTs instead of chest ports or FICC ports?

Upper Arm Central Venous Port Implantation: A 6-Year Single Institutional Retrospective Analysis and Pictorial Essay of Procedures for Insertion

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Abstract

Background: The requirement of central venous (CV) port implantation is increasing with the increase in the number of cancer patients and advancement in chemotherapy. In our division, medical oncologists have implanted all CV ports to save time and consultation costs to other departments. Recently, upper arm implantation has become the first choice as a safe and comfortable method in our unit. Here we report our experience and discuss the procedure and its potential advantages.

Methods: All CV port implantations (n = 599) performed in our unit from January 2006 to December 2011 were analyzed. Procedural success and complication rates between subclavian and upper arm groups were compared.

Upper arm CV port implantation, compared with subclavian implantation, can provide safety and comfort benefits to both medical professionals and cancer patients. Authors hope that this procedure will become more common and eventually be validated in prospective multicenter randomized clinical trials regarding its non-inferiority or superiority to other subclavian or internal jugular procedures



Follow-Up of Radiologically Totally Implanted Central Venous Access Ports of the Upper Arm: Long-Term Complications in 127,750 Catheter-Days

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Jochen Herrmann
Friederike Heller
Thorsten Derlin
Andreas Koops
Gerhard Adam
Christian R. Habermann

OBJECTIVE. The purpose of this article is to retrospectively evaluate radiologically totally implanted central venous access ports (VAPs) of the upper arm in terms of safety, technical feasibility, and device-related complications.

MATERIALS AND METHODS. Five hundred seven consecutive patients (mean [$\pm$ SD] age, 59.2 ± 11.4 years) who received a totally implanted central VAP between January 2005 and July 2010 were included. The insertion procedure was performed in an interventional radiology suite using the Seldinger technique. Neither antibiotic prophylaxis nor long-term anticoagulation was administered.

RESULTS. In 507 patients, a total of 523 devices were implanted. Of these 523 proce-

Arm ports can be safely radiologically inserted and are effective for delivery of chemotherapy, parenteral nutrition, and frequent venous medication in oncologic patients.

The British Journal of Radiology, 85 (2012), e966–e972

Totally implantable venous power ports of the forearm and the chest: initial clinical experience with port devices approved for high-pressure injections

¹J P GOLTZ, MD, ¹C NOACK, ¹B PETRITSCH, MD, ²J KIRCHNER, MD, ¹D HAHN, MD and ¹R KICKUTH, MD

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They conclude that implantation of TIVPPs in the chest or forearm is a safe and feasible procedure with a high technical success rate when using a percutaneous image guided approach.

Long-term Outcome of Peripherally Implanted Venous Access Ports in the Forearm in Female Cancer Patients

**Laura Klösge • Carsten Meyer • Jack Boschewitz •
Magnus Andersson • Christian Rudlowski •
Hans H. Schild • Kai Wilhelm**

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Peripherally implanted venous access ports can be used safely to administer long-term chemotherapy in female cancer patients. Special attention should be paid to signs of skin dehiscence in female patients with peripheral forearm ports.

ORIGINAL ARTICLE

Junichiro Kawamura · Satoshi Nagayama
Akinari Nomura · Atsushi Itami · Hiroshi Okabe
Seiji Sato · Go Watanabe · Yoshiharu Sakai

Long-term outcomes of peripheral arm ports implanted in patients with colorectal cancer

In conclusion, their results indicate that peripheral arm ports are safe and have excellent short- and long-term outcomes. They consider peripheral arm ports a good alternative to central venous ports implanted in the chest

- No need for OR
- No major complications such as pneumothorax etc
- No visible scars
- Less invasive procedure
- Brachial artery easy to compress in case of accidental puncture
- Increased satisfaction and less pain for the patient



Robert Dawson's Zone Method

Advantages

We can choose any vein we want no matter the proximity to the axilla.

We can choose any exit site we want and in most cases we can discuss it with the patient.

Infection rate is reduced

Thrombosis rate is reduced

The caliber of the vessel is bigger when we are close to the axilla and the procedure is easier to perform which is ideal for trainees.

Disadvantages

Lymph node dissection in both axillas

Thrombosis in big vessels at the upper limb

Small caliber of the vessel (less than 5 mm)

To cut the long story short...

PICC ports, when compared to chest ports, have all the advantages of the latest without their disadvantages

Even though they are more comfortable than PICCs, the patients have to be pinched/prickled every time it is used

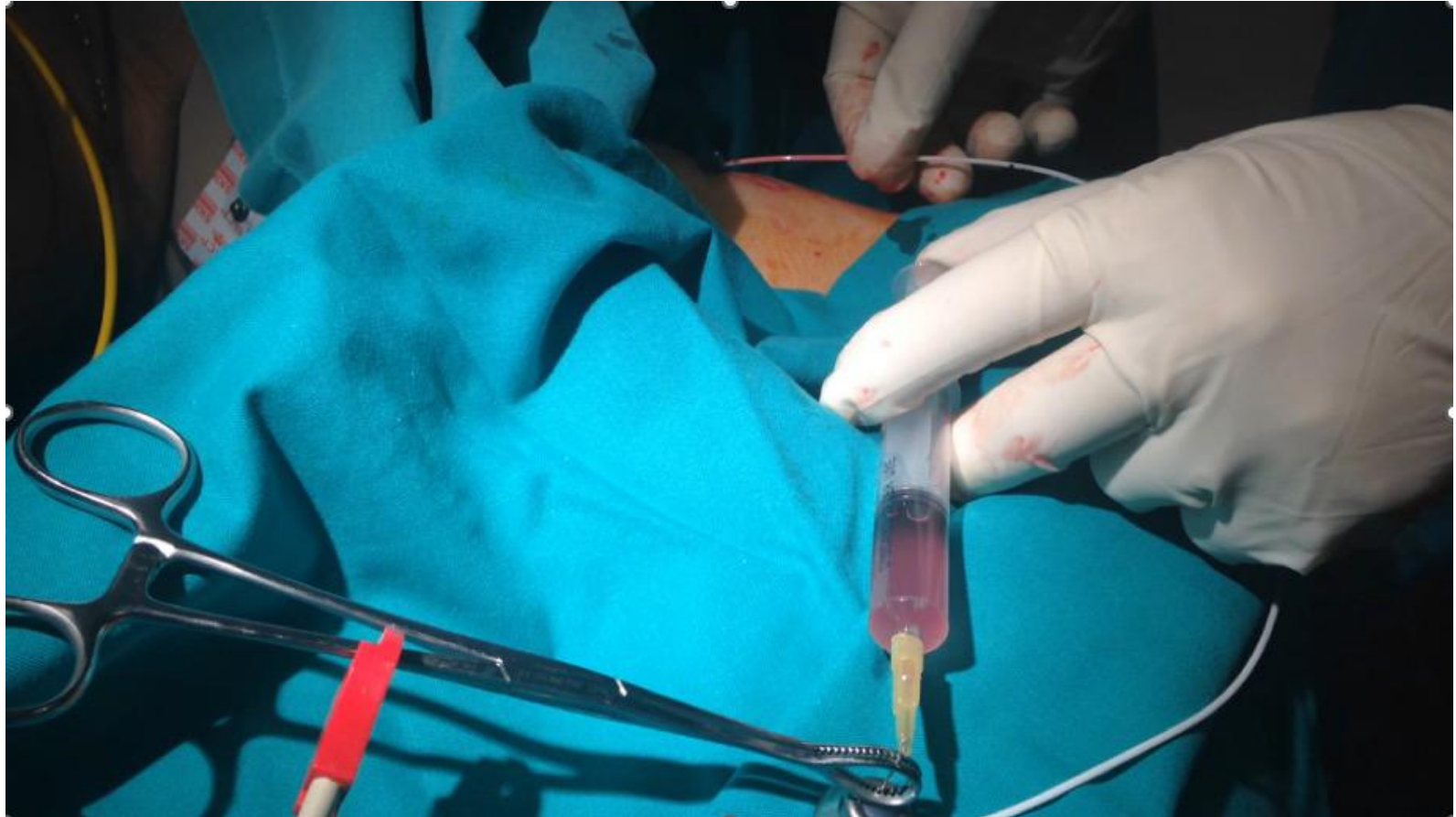
The patient is not restricted, he can even go swimming or do any kind of physical activity he might want to

However, their removal is much more difficult than that of a PICC

Prehistory

The span of time before recorded history or the invention of writing systems





PICC Ports

A Glorious choice !!!!!

- Much better than any other VA device
-
- As it comes to the implanted devices
-
- PICC ports, CICC ports and FICC ports

PICC ports

Best (?) Solution

No exposure for the patient

No major complications

Pain free procedure

No prominent scars

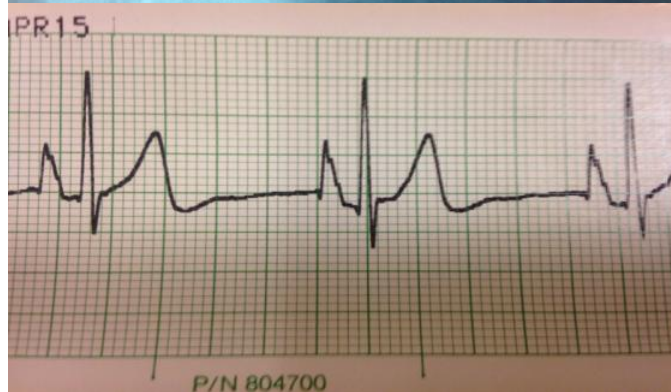
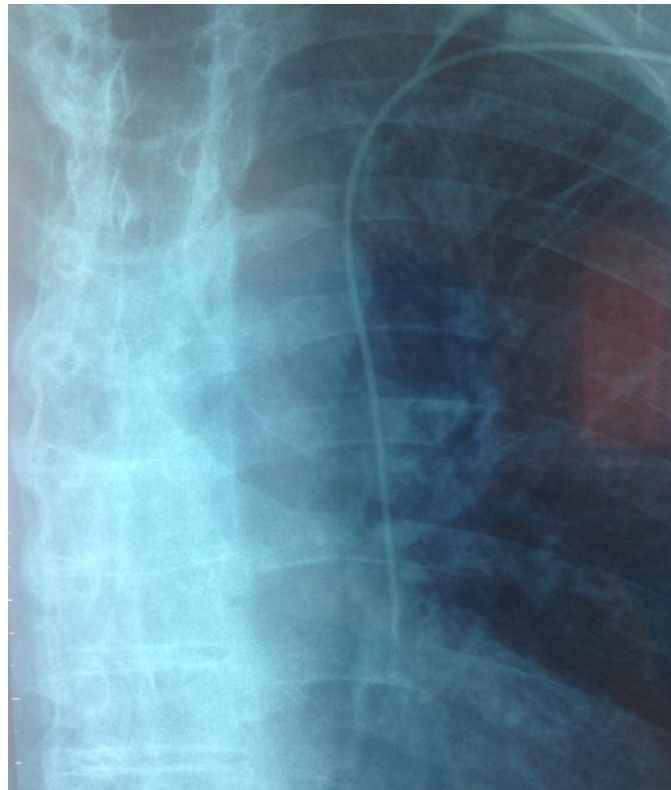
- On the other hand
- Smaller diameter of the vein
- Bigger length of the catheter
- Need for a micro introducer (\$\$\$)

-
- **CICC** Ports
-
- Best solution without ?
-
- Bigger diameter of the vein
- Easy procedure, ideally for the trainees

- **Small diameter of the vein**
- **No major complications no matter the level of the trainee**
- **Breast cancer (Lymph node dissection on the other hand)**

- FiCCs
-
- Only in the cases of SCLC
-
- Superior vena Cava syndrome

Complications



Persistent left superior vena cava leads to catheter malposition during PICC Port placement.



Thrombosis

Arterial puncture

Infection

Catheter occlusion

Catheter fracture

Catheter malposition

Leakage

Our policy after sales service.

Every patient has a hot line mobile number so that he can come in contact with the nurse who performed the operation 24h/day if need be.

All patients receive a leaflet where all technical aspects related to the VAD are described and instruction for anyone else to whom it may concern (other nurses, physicians etc)

The referred physician is informed right after the end of the placement

We change the trauma gauzes and inspect the trauma on days 1, 3 and 7.

After day 7 the patient is released and can go about on his own

We flash the port using normal saline every 20 days even if the port is not used

We usually remove the port at the end of the therapy but we also respect the patient's will if he/she wants to keep it for only a short period of time



Thank you very much

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