

CT PORTS

TECH GUIDE

Dignity ProFUSE^{CT}



CONFIRM THE PATIENT HAS A DIGNITY® OR PRO-FUSE® CT INJECTABLE PORT

Check patient's chart for Medcomp® CT Port patient record sticker.



Patients may aid in port confirmation by presenting the patient identification card or key ring tag they received when the port was implanted.



X-ray imaging of the port reveals the letters "CT" printed on the port.

POWER INJECTION PROCEDURE – NON-CORING NEEDLE ONLY

1. Ensure the port is accessed with a power injectable needle. Make certain that the needle tip is inserted fully within the port.
WARNING: A power injectable needle must always be used to access the Medcomp® CT Port for power injecting contrast media.
2. Attach a syringe filled with sterile normal saline.
3. Check blood return and vigorously flush the port with at least 10 ml of sterile normal saline. Check for patency with the patient in the position that they will assume during the CECT procedure.
WARNING: Failure to ensure patency of the catheter prior to power injection studies may result in port system failure.
4. Detach syringe.
5. Ensure contrast is at proper viscosity prior to power injection. Refer to contrast agent manufacturer recommendations.
6. If possible, the patient should receive power injection with arms vertically above the shoulder with the palms of the

hands on the face of the gantry during injection. This allows for uninterrupted passage of injected contrast through the axillary and subclavian veins at the thoracic outlet.

7. Attach the power injection device securely to the power injectable needle.
8. Check table below to confirm the maximum flow rate and maximum pressure setting.

NEEDLE GAUGE SIZE	19 GA	20 GA	22 GA
MAXIMUM FLOW RATE*	5ml/sec	5ml/sec	2ml/sec
MAX PRESSURE - PLASTIC*	325 psi	325 psi	325 psi

*Machine Setting

WARNING: Do not exceed a 325 psi pressure limit setting, or the maximum flow rate setting shown.

9. Inject warmed contrast, taking care not to exceed the flow rate limits.

10. Disconnect the power injection device.
11. Flush the Medcomp® CT Port with 10 ml of sterile normal saline.
12. Perform heparin lock procedure. Remember that some patients may be hypersensitive to heparin or suffer heparin induced thrombocytopenia (HIT) and these patients must not have their port locked with heparinized saline.
13. After therapy completion, flush port per institutional protocol.
Refer to IFU for additional information

SITE PREPARATION

Always inspect and aseptically prepare the injection site prior to accessing the port.

EQUIPMENT

- Alcohol or Chlorhexidine Wipe
- Antiseptic Swabs
- Sterile Gloves

NOTE: Additional sterile precautions may be used according to hospital protocol.

PROCEDURE

1. Explain procedure to patient. Warn of needle prick sensation. (Sensation of needle insertion decreases over time. Use of a topical anesthetic may be appropriate.)
2. Wash hands thoroughly.
3. Don sterile gloves, and follow your hospital protocol for sterile precautions.
4. Cleanse or scrub the area according to the cleansing agent manufacturers' instructions and institutional protocol. Allow to dry completely.

ACCESSING IMPORTED PORTS

PROCEDURE

1. Perform aseptic site preparation.
2. Locate port septum by palpation.
 - a. Locate top of port with non-dominant hand.
 - b. Position port between thumb and first two fingers of non-dominant hand. Aim for center point between the thumb and two fingers.
3. Insert non-coring needle perpendicular to port septum. Advance needle through the skin and septum until reaching bottom of reservoir.
4. Verify correct needle placement and patency by blood aspiration and flushing.
5. Always flush the port following injection.
6. Perform heparin lock procedure. Remember that some patients may be hypersensitive to heparin or suffer heparin induced thrombocytopenia (HIT) and these patients must not have their port locked with heparinized saline.
7. When deaccessing the port, the needle should be removed using the positive pressure technique.

DETERMINING PORT VOLUMES

CATHETER PRIMING VOLUMES	
FRENCH SIZE	CATHETER VOLUME PER CM
5F	0.011 (ML/CM)
6.6F	0.014 (ML/CM)
8F	0.017 (ML/CM)
9.6F	0.020 (ML/CM)

Calculation Example:
Cath Length(CM) X Cath volume per cm + Port Volume (mL) = System Total Volume (mL)

For future reference it will be helpful to record this information on the patient's chart and/or patient ID card.

PORT PRIMING VOLUMES	
MODEL	VOLUME (ML)
Plastic Dignity® Mini Profile CT Port	0.43 ML
Plastic Dignity® Low Profile CT Port	0.43 ML
Plastic Dignity® Mid-Sized CT Port	0.51 ML
Plastic Dignity® 5F Mid-Sized CT Port	0.45 ML
Pro-Fuse Low Profile CT Port	0.43 ML
Pro-Fuse Std CT Port	0.63 ML

RECOMMENDED FLUSHING VOLUMES

PROCEDURE	VOLUME (100 U/ML)
When port not in use	5ml heparinized saline every 4 weeks
After each infusion of medication or TPN	10ml sterile normal saline then 5ml heparinized saline
After blood withdrawal	20ml sterile normal saline then 5ml heparinized saline
After power injection of contrast media	10ml sterile normal saline then 5ml heparinized saline

FOR DIGNITY® AND PRO-FUSE® PORTS

INDICATIONS FOR USE:

- The CT Power Injectable Implantable Infusion Ports are indicated for patient therapies requiring repeated access to the vascular system. The port system can be used for infusion of medications, I.V. fluids, parenteral nutrition solutions, blood products, and for the withdrawal of blood samples.
- When used with a power injectable needle, the Power Injectable Implantable Infusion Port device is indicated for power injection of contrast media. For power injection of contrast media, the maximum recommended infusion rate is 5ml/s with a 19 or 20 gauge non-coring power injectable needle. The maximum recommended infusion rate is 2ml/s with a 22 gauge non-coring power injectable needle.

CONTRAINDICATIONS:

This device is contraindicated for catheter insertion in the subclavian vein medial to the border of the first rib, an area which is associated with higher rates of pinch-off.1,2

THE DEVICE IS ALSO CONTRAINDICATED.

- When the presence of device related infection, bacteremia, or septicemia is known or suspected.
- When the patient's body size is insufficient for the size of the implanted device.
- When the patient is known or is suspected to be allergic to materials contained in the device.

- If severe chronic obstructive lung disease exists.
- If the prospective insertion site has been previously irradiated.
- If the prospective placement site has previously suffered episodes of venous thrombosis or vascular surgical procedures.
- If local tissue factors will prevent proper device stabilization and/or access.

Refer to Instructions for Use provided with the product for complete instructions, warnings, precautions, and contraindications. Observe all instructions for use prior to using products. Failure to do so may result in patient complications.

REFERENCES:

1. Jacobs, D.M. et. al., "Anatomical and Morphological Evaluation of Pacemaker Lead Compression. PACE. 1993 Mar; 16(1):434-444.
2. Magney, J.E. et. al., "Anatomical Mechanisms Explaining Damage to Pacemaker Leads, Defibrillator Leads, and Failure of Central Venous Catheters Adjacent to the Sternoclavicular Joint". PACE. 1993 Mar; 16(1):445-457.

MR Conditional - 3 Tesla (artifacts may present imaging problems if MRI area of interest is on or near area where device is located). *Follow labels and IFU for any hazards, warnings, indications, and cautions.