STANDARDIZED PROCEDURE
ENDOSCOPIC VEIN HARVEST

These procedures are intended to describe procedures performed by Nurse Practitioners and/or Certified Nurse Midwives (depending on the clinical privileges granted to the individual practitioner) at UC San Diego Health.

I. Policy

a. Function: To direct the Cardiothoracic Surgery Nurse Practitioner in the harvesting of the Saphenous Vein using Endoscopy...

b. Circumstances:

i. Setting: See Cardiothoracic Surgery Nurse Practitioner General Policy for Operative Procedures Standardized Procedure

ii. Supervision: See Cardiothoracic Surgery Nurse Practitioner General Policy for Operative Procedures Standardized Procedure

iii. Patient Conditions/Indications for Endoscopic Vein Harvest:

- Coronary Artery Bypass Grafting requiring the use of vein
- As per Surgeon preference

II. Protocol

a. Definition: Maintaining hemostasis of the surgical field during Cardiothoracic Procedures per Surgeon preference

b. Objective: See section I-b-iii for indications

c. Assessment: Patient which meets criteria above as per Attending Cardiothoracic Surgeon

d. Plan:

Equipment Necessary for procedure includes but is not limited to:

- Sterile Environment (Scrubbed into sterile Operating Room Environment)
- Endoscopic Vein Harvesting Device
- Endoscopic Set up (i.e.: Monitor)
- Blade
- Electrocautery
- Sterile Marking Pen
- Scissors
- Hemoclips
- Normal Saline or Blood
- Right Angle

Pre-Procedure

1. Education provided during Pre-Operative period (see Pre-Operative Evaluation Standardized Procedure)

2. Consent signed Pre-Operatively for procedures performed in the Operating Room

Patient Position

As per Surgeon

Endoscopic Vein Harvest Procedure

1. Incise the skin at the level of the knee approximately 2 cm medial to the medial epicondyle
2. Retract the tissue in order to expose the vessel utilizing hands or instruments (See Intra-operative Tissue Manipulation Standardized Procedure)
3. Once Saphenous Vein is exposed dissect the tissue around the vein to allow for the introducer to be placed (See Intra-operative Tissue Manipulation Standardized Procedure)
4. Place endoscopic device on top of the vein and begin dissection of tissues around the vein (See Intra-operative Tissue Manipulation Standardized Procedure)
5. Once the Saphenous Vein is free, and branches have been identified, begin cauterizing and cutting vein branches (See Intra-operative Tissue Manipulation Standardized Procedure)
6. Confirm that the Saphenous Vein is free from branches by visual inspection of the vein
7. Place endoscope into the tunnel and insert up the groin. Mark the light source on the skin with a marking pen. Then make an incision at this site with the scope in place.
8. Identify the vein by using retraction with either instruments or finger
9. Clamp the Saphenous Vein with a right angle, cut with scissors and clip stump (See Intra-operative Hemostasis, Intra-operative Tissue Manipulation, and Intra-operative Retraction Standardized Procedures)
10. Remove the endoscopic device from the leg and mobilize the vein at the level of the knee using a finger or instruments. Clip the distal end of the vein and remove it for bypass grafting. (See Intra-operative Hemostasis, Intra-operative Tissue Manipulation, Intra-operative Retraction Standardized Procedures)
11. Hook the harvested vein up to normal saline or blood to irrigate and check for any open areas that need closing with suture/clip
12. Irrigate the tunnel several times, assess for hemostasis, and close incision per the Surgeon's direction (See Intra-operative Hemostasis, Intra-operative Wound Closure, Intra-operative Tissue Manipulation and Intra-operative Retraction Standardized Procedures)

Patient conditions requiring Immediate Physician Attention (Complications) including but not limited to:

- Hemorrhage
- Technical-Slipped stitches, loosening of knots
- Cardiac Arrest-Emergency Protocols and ACLS will be instituted

Follow-Up:

Continued evaluation and treatment throughout peri-operative course

Record Keeping: See Cardiothoracic Surgery Nurse Practitioner General Policy for Operative Procedures Standardized Procedures

III. Requirements for the Nurse Practitioner

a. Education and Training: See Cardiothoracic Surgery Nurse Practitioner General Policy for Operative Procedures Standardized Procedures
b. Evaluation: See Cardiothoracic Surgery Nurse Practitioner General Policy for Operative Procedures Standardized Procedures

IV. RESPONSIBILITY

Please contact the Advanced Practice Council if you need help. The administrative assistant for the Chief Nursing Officer can direct you. Call; 619-543-3438.

V. HISTORY OF PROCEDURE

Revised by the Committee of Interdisciplinary Practices: 2/26/2014, 9/28/2016 Reviewed by the Medical Staff Credentials Committee: 3/5/2014, 10/6/2016 Approved by the Medical Staff Executive Committee: 3/20/2014, 10/7/2016