

STANDARDIZED PROCEDURE

ILIAC CREST BONE GRAFT (Adult, Peds)

I. Definition

This procedure will take place when a patient has need for bone graft for spinal surgery. This is the most common site for autologous bone graft. This procedure is to allow the Advanced Health Practitioner (AHP) to safely perform an iliac crest bone graft.

II. Background Information

A. Setting:

The setting (inpatient vs outpatient) and population (adults vs pediatrics) for the Advanced Health Practitioner (AHP) is determined by the approval of the privileges requested on the AHP Privilege Request Form. If the procedure is being done on a Pediatric patient, make sure Child Life is involved and use age appropriate language and age appropriate developmental needs with care of children, as appropriate to the situation.

B. Supervision

The necessity of this procedure will be determined by the Advanced Health Practitioner in collaboration with the supervising physician or his/her designee. Designee is defined as another attending physician who works directly with the supervising physician and is authorized to supervise the Advanced Health Practitioner.

Direct supervision will not be necessary once competency is determined, as provided for in the procedure. The Advanced Health Practitioner will notify the physician immediately upon being involved in any emergency or resuscitative events or under the following circumstances:

1. Patient decompensation or intolerance to the procedure
2. Bleeding that is not resolved
3. Outcome of the procedure other than expected

C. Indications

Indicated when a patient needs autograft bone for augmentation of spinal fusion.

D. Precautions/Contraindications

1. Intolerance to anesthesia or any other anesthetic complication
2. Decompensation
3. Abnormal lab values inconsistent with safe surgical outcome
4. Sepsis
5. Absent or incorrect surgical instruments
6. Absent Consent

STANDARDIZED PROCEDURE
ILIAC CREST BONE GRAFT (Adult, Peds)

7. Any other Condition deemed unsafe or unacceptable for good surgical outcome
8. Prior bone graft taken from site
9. Attending not available by phone or pager to assist if needed

III. Materials

1. Sterile draping and surgical equipment
2. Surgical equipment for initiation of surgery
3. Leksell ronguers with large spinal curettes
4. Bone saw
5. Pulsatile lavage unit
6. Surgi-foam hemostatic agent
7. Supplies for closing wound

IV. Iliac Crest Bone Graft

A. Pre-treatment evaluation

Used in concert with other surgical procedure (spinal fusion). Review films, patient chart, indications, contraindications and patient's current clinical condition with attending physician and patient in clinic.

B. Set up

Working with Operating Room nurses, make sure proper supplies are available and in the room.

C. Patient Preparation

Review consent and procedure with the patient. This is done in concert with another procedure. Mark surgical site. Answer any questions prior to induction of anesthesia. Participate in Time-Out. Determine need for separate incision directly over Iliac crest or tunnel to crest through midline incision made for spinal fusion procedure.

D. Procedure

1. After induction of anesthesia, position patient appropriately
2. Prep and drape patient in sterile fashion
3. Either incise skin immediately over iliac crest or using bovie, tunnel to crest using prior midline incision created for spinal fusion
4. Expose Iliac crest
5. Using ronguers, create a defect in the cortical bone of the iliac crest.
6. Use large spinal surettes to lift out cancellous bone from iliac crest.
7. Use surgi-foam to achieve hemostasis.
8. Pulse lavage wound and iliac crest with at least 1 liter of irrigant with antibiotic
9. Install regular drain only if necessary.

STANDARDIZED PROCEDURE
ILIAC CREST BONE GRAFT (Adult, Peds)

10. Close wound, turn attention to rest of procedure.

E. Post-procedure

After iliac crest bone is taken, it is then transferred to specific areas on the spine to facilitate bony growth and eventually fusion. Once the surgery is done, the patient is transported to the recovery room.

F. Follow-up treatment

The patient will be followed on the hospital floor by neurosurgery team. The patient is discharged to home when appropriate, and follows up in the outpatient clinic at regular intervals.

G. Termination of treatment

Treatment is terminated when it is determined by the AHP and attending surgeon that the patient has healed and recovered and no longer needs follow-up.

V. Documentation

A. Documentation is in the electronic medical record

1. Documentation of the pretreatment evaluation and any abnormal physical findings.
2. Record the time out, indication for the procedure, procedure, consent, EBL, the outcome, how the patient tolerated the procedure, medications (drug, dose, route, & time) given, complications, and the plan in the note, as well as any teaching and discharge instructions.
3. Attending Operative Report

B. All abnormal findings are reviewed with supervising physician.

C. Properly filled out post-op orders

VI. Competency Assessment

A. Initial Competence

1. The Advanced Health Practitioner will be instructed on the efficacy and the indications of this therapy and demonstrate understanding of such.
2. The Advanced Health Practitioner will demonstrate knowledge of the following:
 - a. Medical indication and contraindications of Iliac Crest Bone Graft
 - b. Risks and benefits of the procedure
 - c. Related anatomy and physiology
 - d. Consent process (if applicable)

STANDARDIZED PROCEDURE
ILIAC CREST BONE GRAFT (Adult, Peds)

- e. Steps in performing the procedure
 - f. Documentation of the procedure
 - g. Ability to interpret results and implications in management.
3. Advanced Health Practitioner will observe the supervising physician perform each procedure three times and perform the procedure **three** times under direct supervision.
 4. Supervising physician will document Advanced Health Practitioner's competency prior to performing procedure without supervision.
 5. The Advanced Health Practitioner will ensure the completion of competency sign off documents and provide a copy for filing in their personnel file and a copy to the medical staff office for their credentialing file.

B. Continued proficiency

1. The Advanced Health Practitioner will demonstrate competence by successful completion of the initial competency.
2. Each candidate will be initially proctored and signed off by an attending physician. Advanced Health Practitioner must perform this procedure at least **three** times per year. In cases where this minimum is not met, the attending, must again sign off the procedure for the Advanced Health Practitioner. The Advanced Health Practitioner will be signed off after demonstrating 100% accuracy in completing the procedure.
3. Demonstration of continued proficiency shall be monitored through the annual evaluation.
4. A clinical practice outcomes log is to be submitted with each renewal of credentials. It will include the number of procedures performed per year and any adverse outcomes. If an adverse outcome occurred, a copy of the procedure note will be submitted.

VII. RESPONSIBILITY

Questions about this procedure should be directed to the Chief Nursing and Patient Care Services Officer at 353-4380.

VIII. HISTORY OF POLICY

Revised April 2012 by Subcommittee of the Committee for Interdisciplinary Practice
Reviewed April 2012 by the Committee on Interdisciplinary Practice
Prior revision October 2008
Approved April 2012 by the Executive Medical Board and the Governance Advisory Council.

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STANDARDIZED PROCEDURE
ILIAC CREST BONE GRAFT (Adult, Peds)