

Bone Marrow Aspiration and Biopsy Information Sheet

General indications for the procedure: A bone marrow aspiration and biopsy is a procedure used to obtain a sample of the liquid part of the bone marrow and a small piece of the iliac bone to examine under the microscope. This is a diagnostic procedure that is helpful to determine if there is a bone marrow abnormality.

Description of the procedure: The aspiration and biopsy is performed in the hematology outpatient clinic procedure room, at the hospital bedside, or very rarely, in the operating room. The patient is positioned on his/her side. The procedure site is washed with the cleansing agents betadine and alcohol and anesthetized with lidocaine (similar to what a dentist uses). The bone marrow aspiration needle is inserted through the skin into the bone marrow cavity to obtain a sample of the liquid part of the bone marrow. The bone marrow aspiration needle is then removed and another needle, the bone marrow biopsy needle, is inserted in the same way in order to obtain a small sample of bone biopsy. All steps of the procedure are thoroughly explained before any action is taken. If discomfort persists, extra local anesthesia (lidocaine) is given. Following the procedure, the patient lies on his/her back and is monitored for 5-10 minutes.

Procedure Alternatives, if any: No biopsy, or having the biopsy done or having the biopsy done in the operating room with a surgical incision and the need for general anesthesia.

Probable Consequences of Refusing Procedure: Not knowing the cause or the extent of the hematological problem to guide possible treatment of the blood problems.

Risks of the procedure: The two most common complications that may occur from the procedure are bleeding and infection at the puncture site. The bleeding at the puncture site is usually controlled with external compression and gauze. Local infection at the puncture site is rare, but can require oral antibiotics. The procedure is performed under sterile conditions to prevent infections.

Person(s) Performing the Procedure: The key portion of the procedure is performed by a Physician, Physician Assistant, or Nurse Practitioner who is a member of the medical staff at Rush University Medical Center and/or a fellow/resident who is observed by a credentialed member of the medical staff. Residents and Fellows are licensed physicians in post-graduate residency and post-residency training programs. Parts of the procedure which they perform will be based on their level of competency.