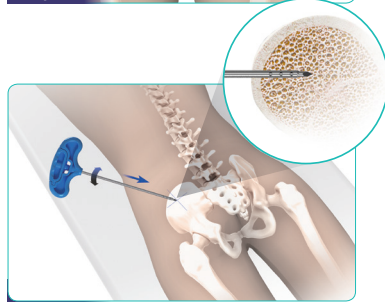
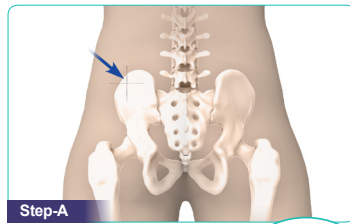
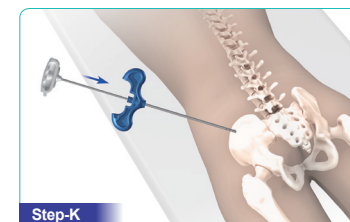
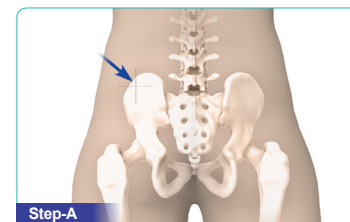


1-1. Aspiration Procedure



- A** Place the patient in either Prone or Decubitus position.
- B** Posterior iliac crest is the most common side to obtain bone marrow.
- C** Clean the skin with an antiseptic solution
- D** Inject the marked area with local anesthetic to the periosteum.
- E** Make a skin incision with a scalpel blade over the marked area.
- F** Insert the needle (combining Cannula with Sharp stylet) through the incision.
- G** By rotating the needle, put the needle gently through the periosteum into the cortex.
- H** Remove Sharp stylet by rotating upper section of handle and pulling straight out.
- I** By rotating the Cannula needle, continue putting the Cannula needle forward into the bone marrow cavity. The marrow cavity is generally detected by decreased resistance.
- J** Connect the syringe to Cannula hub.
- K** Apply suction by withdrawing syringe plunger. Remove the syringe collecting the aspirated specimen.
- L** Remove the Cannula from body slowly.

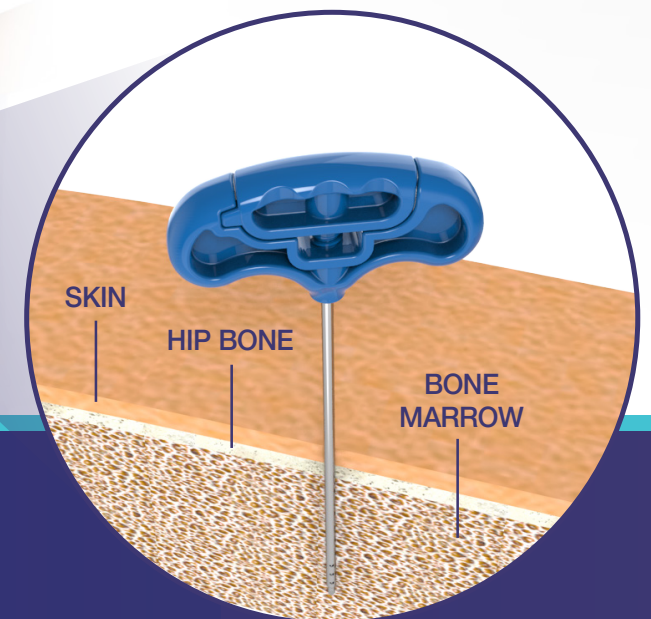
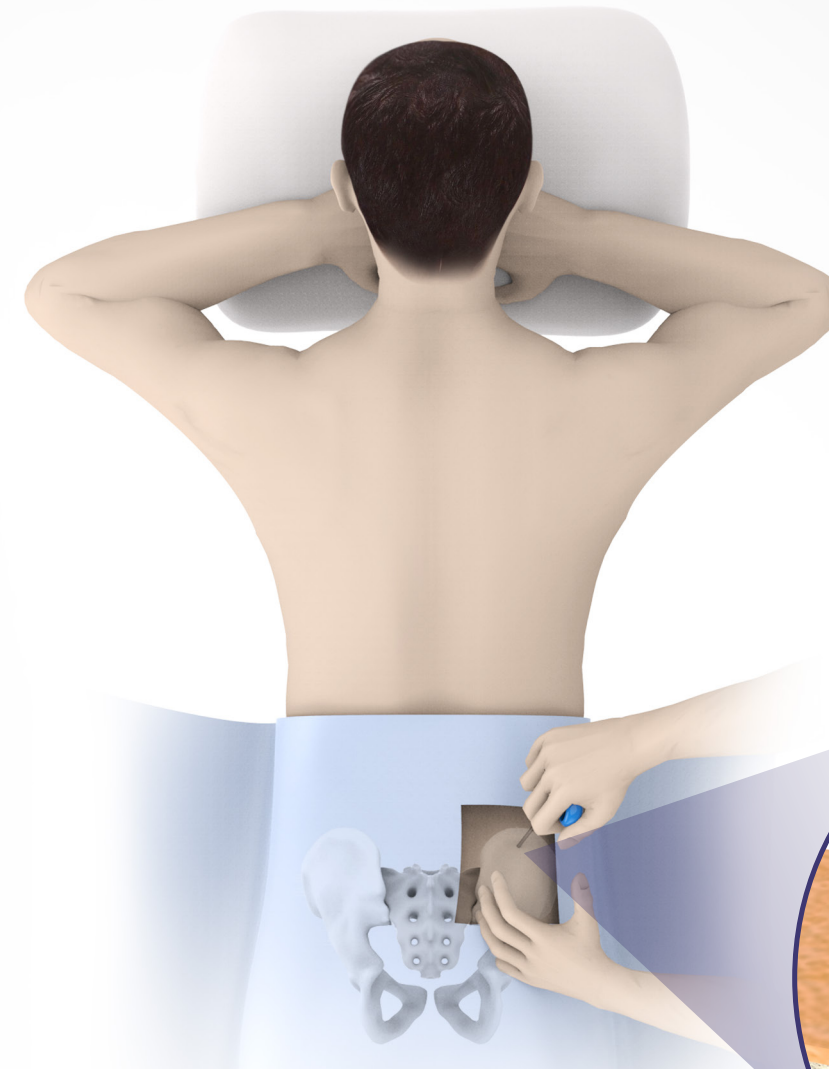
1-2. Biopsy Procedure



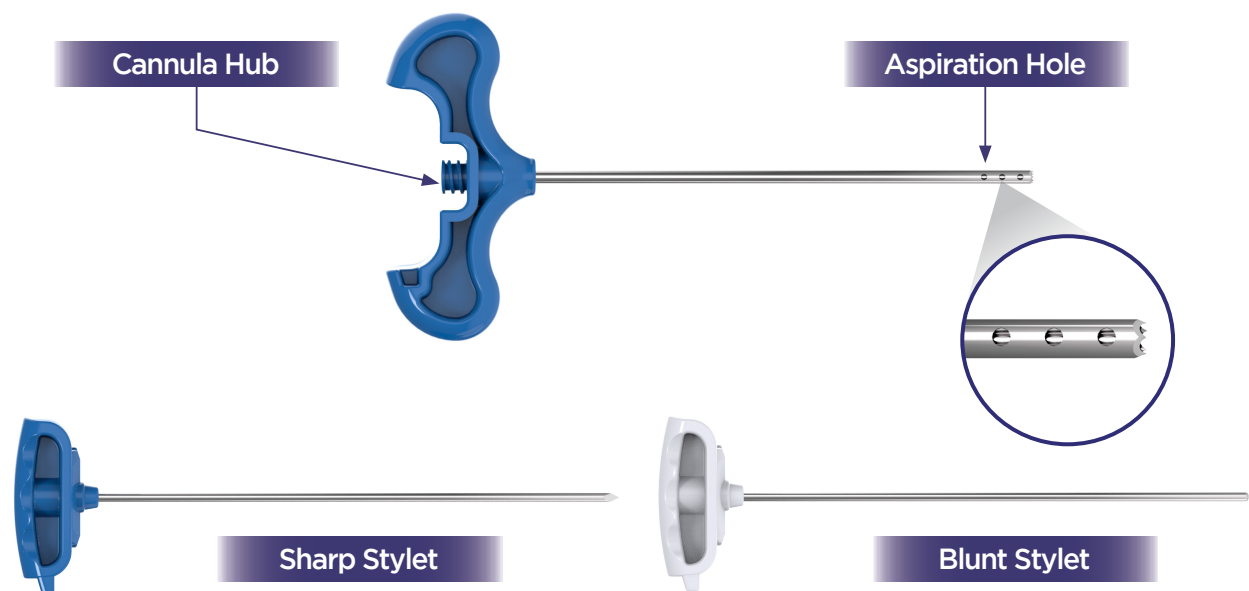
Take the biopsy after the aspiration using the same skin incision, but choosing a different location to obtain the biopsy sample.

Repeat Steps A through I of the procedure and continue as follows:

- J** By rotating the Cannula needle (for better cutting), slowly and gently putting the needle until adequate marrow is obtained.
- K** Insert the Blunt stylet into the Cannula to check the sample length in the Cannula.
- L** Remove the Blunt stylet.
- M** Remove the Cannula from body slowly, and push the specimen out with the Blunt stylet.



COLEX
Bone Marrow Biopsy Needle



- 1 **Cannula:** It drills holes with Sharp stylet and collects the bone marrow specimens.
- 2 **Cannula hub:** It connects the syringe to aspirate the bone marrow specimens.
- 3 **Aspiration hole:** It uses for aspirating the bone marrow.
- 4 **Sharp stylet:** It drills holes at external part of bone.
- 5 **Blunt stylet:** It pushes the specimens out of Cannula and calculates amount of the collected specimens.

> Model Information & Spec

No.	Model Name	Cannula		Sharp stylet		Blunt stylet	
		Length (mm)	Out diameter (Ø)	Length (mm)	Out diameter (Ø)	Length (mm)	Out diameter (Ø)
1	SWBMN11H11	110	3.0	130	2.3	127	2.3
2	SWBMN13H11	110	2.3	130	1.7	127	1.7
3	SWBMN08H15	150	4.3	170	3.7	167	3.7
4	SWBMN11H15	150	3.0	170	2.3	167	2.3

> What is bone marrow?

Bone marrow produces red blood cells, white blood cells, and platelets. Bone marrow is the soft tissue that is inside most large bones. Bone marrow makes a lot of the body's blood cells, including red blood cells, white blood cells, and platelets.

> Why do a bone marrow biopsy?

Health providers order bone marrow biopsies when there are signs or symptoms that something is wrong with blood cell production. Bone marrow biopsies are also used for patients with blood-related cancers to see how their treatment is working. They can be used to check the progress of chemotherapy.

> Advantages

- Minimally invasive
- Low risk therapy
- No open surgery
- Quick recovery

> Features

- It is easy to collect bone marrow because there is a aspiration hole.
- All-In-One Kit & Disposable Products

> Indication for use

Bone Marrow Biopsy Needle (Colex™) intended for the purpose of harvesting bone and/or bone marrow specimens