Bone Marrow Biopsy Needle: The Goldenberg Snarecoil

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A biopsy is a piece of tissue which is removed from a living body for the purpose of examination for medical diagnosis. This is usually done as a minor operation under local anesthetic. A biopsy is taken to aid the consultant physician in obtaining a diagnosis. A large range of other tests, often less invasive, are available, but if these prove inconclusive, a biopsy sample is a direct way of examining the cellular structure of the tissue.

What happens when the biopsy is taken?

1. Histology - uses stains and dyes to look at the light microscopic anatomy of the tissue and cells.

2. Histochemistry - uses chemical techniques to look at histological sections.

3. Electron microscopy - uses very high magnifications to look at the cellular structure and substructure.

A summary of the steps used in taking a biopsy include: Using either CT or ultrasound, the desired area is localized. Then, a local anesthetic is given with a small needle. A fine needle is advanced towards the area to be biopsied. When the needle is in the correct place, a syringe is placed on the end of the needle, and cells are aspirated (sucked) into the needle shaft.

The SNARECOIL bone marrow biopsy needle is a specimen capturing needle that incorporates a tiny internal snare mechanism that coils around the tip of the specimen after it has entered the needle and thereby captures it. This mechanism eliminates the need to significantly move the needle after it has been advanced into the bone marrow tissue to sever and recover the specimen.

This advantage is relevant not only for the patient who may require a single bone marrow biopsy for diagnosis but especially for those patients with hematological malignancies such as leukemia or lymphomas that may require multiple procedures to evaluate the efficacy of their treatments.

Sources:

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