HIV and AIDS-Related Cancer - Diagnosis [1]

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ON THIS PAGE: You will find a list of the common tests, procedures, and scans that doctors can use to find out what?s wrong and identify the cause of the problem. To see other pages, use the menu on the side of your screen.

Doctors use many tests to diagnose cancer and find out if it has spread to another part of the body, called metastasis. Some tests may also determine which treatments may be the most effective. For most types of cancer, a biopsy is the only way to make a definitive diagnosis of cancer. If a biopsy is not possible, the doctor may suggest other tests that will help make a diagnosis. Imaging tests may be used to find out whether the cancer has spread. This list describes options for diagnosing an HIV/AIDS-related cancer, and not all tests listed will be used for every person. Your doctor may consider these factors when choosing a diagnostic test:

- Age and medical condition
- Type of cancer suspected
- Signs and symptoms
- Previous test results

The following tests may be used to diagnose an HIV/AIDS-related cancer or determine if or where it has spread:

Biopsy [3]**.** A biopsy is the removal of a small amount of tissue for examination under a microscope. Other tests can suggest that cancer is present, but only a biopsy can make a definite diagnosis. The sample removed during the biopsy is analyzed by a pathologist. A pathologist is a doctor who specializes in interpreting laboratory tests and evaluating cells, tissues, and organs to diagnose disease.

Computed tomography (CT or CAT) scan [4]**.** A CT scan creates a three-dimensional picture of the inside of the body with an x-ray machine. A computer then combines these images into a detailed, cross-sectional view that shows any abnormalities or tumors. A CT scan can also be used to measure the tumor?s size. Sometimes, a special dye called a contrast medium is given before the scan to provide better detail on the image. This dye is usually injected into a patient?s vein. CT scans of the chest and abdomen can help find cancer that has spread to the lungs, lymph nodes, or liver.

Kaposi Sarcoma

Endoscopy [5]**.** This test allows the doctor to see the inside the body with a thin, lighted, flexible tube called an endoscope. The person may be sedated as the tube is inserted through the mouth, down the esophagus, and into the stomach and small bowel. Sedation is giving medication to become more relaxed, calm, or sleepy. If abnormal areas are found, the doctor can remove a sample of tissue and check it for cancer. The doctor can examine the large intestine with a specific endoscopic procedure called a colonoscopy [6].

Bronchoscopy [5]**.** This endoscopic test allows the doctor to see inside the lungs with a thin, lighted, flexible tube called a bronchoscope. The person is sedated as the tube is inserted through the mouth or nose, down through the windpipe, and into the breathing passages of the lungs. This procedure may be performed by a surgeon or a pulmonologist. A pulmonologist is a doctor who specializes in lung disease. Tiny tools inside the tube can collect samples of fluid and tissue, so the pathologist can examine the samples.

X-ray. An x-ray is a way to create a picture of the structures inside of the body, using a small amount of radiation.

Photography. Because multiple and scattered skin lesions can develop, doctors regularly photograph parts of the skin in order to find out whether new lesions have developed over time. This is sometimes called mapping.

Non-Hodgkin Lymphoma

Blood tests [7]**.** Many different blood tests provide information about a lymphoma diagnosis, the disease?s effect on the body, and how well treatment is working.

Bone marrow aspiration and biopsy [8]**.** Lymphoma often spreads to the bone marrow, and looking at a sample of the bone marrow can be important for doctors to diagnose lymphoma and to find out if it has spread. A bone marrow aspiration and biopsy are similar procedures and often done at the same time. Bone marrow has both a solid and a liquid part. An aspiration removes a sample of fluid with a needle. A bone marrow biopsy is the removal of a small amount of solid tissue using a needle. The sample(s) are then analyzed by a pathologist. A common site for a bone marrow aspiration and biopsy is the pelvic bone, which is located in the lower back by the hip. The skin in that area is usually numbed with medication beforehand, and other types of anesthesia (medication to block the awareness of pain) may be used.

Molecular testing of the lymphoma cells. Your doctor may recommend running laboratory tests on a sample of the lymphoma cells to identify specific genes, proteins, and other factors unique to the tumor. Results of these tests will help decide whether your treatment options include a type of treatment called targeted therapy (see Treatment Options [9]).

Magnetic resonance imaging (MRI) [10]**.** An MRI uses magnetic fields, not x-rays, to produce detailed images of the brain and spinal column. MRI can also be used to measure the tumor?s size. In addition, MRIs create more detailed pictures of soft tissues and nerves than CT scans. A special dye called a contrast medium is given before the scan to create a clearer picture. This

dye is usually injected into a patient?s vein.

Bone scan [11]**.** A bone scan uses a radioactive tracer to look at the inside of the bones. The tracer is injected into a patient?s vein. It collects in areas of the bone and is detected by a special camera. Healthy bone appears gray to the camera, and areas of injury, such as those caused by cancer, appear dark.

Positron emission tomography (PET) scan [12]**.** A PET scan is a way to create pictures of organs and tissues inside the body. A small amount of a radioactive sugar substance is injected into the patient?s body. This sugar substance is taken up by cells that use the most energy. Because cancer tends to use energy actively, it absorbs more of the radioactive substance. A scanner then detects this substance to produce images of the inside of the body. The exact accuracy and role of PET scanning in NHL is not yet clear, although aggressive subtypes of lymphoma often show up on PET scans. Many oncologists will recommend a PET scan as part of the initial evaluation, especially for the types of lymphoma that are more likely to grow quickly. A PET scan may also help doctors monitor how well treatment is working. There is some evidence that using a PET scan after one or two cycles of treatment may be a useful way to predict if that treatment is likely to completely get rid of the lymphoma. This is not yet proven, but it is being evaluated in many research studies.

Cervical Cancer

Pap test [13]**.** The doctor gently scrapes the outside of the cervix and vagina and takes samples of the cells for testing.

Colposcopy [5]**.** The doctor may do a colposcopy to check the cervix for abnormal areas. A special instrument called a colposcope is used. A colposcope is an instrument that magnifies the cells of the cervix and vagina, similar to a microscope. The colposcope gives the doctor a lighted, magnified view of the tissues of the vagina and the cervix. The colposcope is not inserted into the woman?s body, and the examination is not painful, can be done in the doctor's office, and has no side effects. It can even be done on pregnant women.

After diagnostic tests are done, your doctor will review all of the results with you. If the diagnosis is cancer, these results also help the doctor describe the cancer; this is called staging.

The next section helps explain the different stages for these types of cancer. Use the menu on the side of your screen to select Stages, or you can select another section, to continue reading this guide.

Links:
[1] http://www.cancer.net/cancer-types/hiv-and-aids-related-cancer/diagnosis
[2] http://www.cancer.net/about-us
[3] http://www.cancer.net/node/24406
[4] http://www.cancer.net/node/24486
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