Finding Cancer Early

There are three approaches to fighting cancer: prevention, early detection (screening), and treatment. There is no doubt that there would be far fewer cases of cancer if people would avoid those things that are known to cause cancer. For example, 90% of deaths from lung cancer could be prevented if no one smoked. Unfortunately, only 15% of people with lung cancer survive five years after diagnosis. For lung cancer and most other forms of cancer, an ounce of prevention is worth a pound of cure.

But for many cancers, the risk factors or the causes are not known, or they cannot be changed. Getting older is a risk factor for many cancers. So is having a family history of the disease, but these are things that cannot be changed.

Fortunately, for some (but not all) types of cancer, certain tests or examinations can help find the cancer early, before it has caused any symptoms. These tests are called screening tests. Many kinds of cancer are highly treatable and curable if they are found early. When cancer of the colon or rectum is found before spreading to other parts of the body, about 90% of patients will survive at least five years. If the cancer has already spread to other organs, the survival rate is only 9%. For forms of cancer that can be found early, an ounce of screening can also be worth a pound of cure. That is why it is important that people have the screening tests recommended for them.

In looking at the American Cancer Society (ACS) recommendations for cancer screening, you will see that we do not recommend every possible test for every person. We only advise testing when the scientific evidence has shown that the tests will help reduce the number of deaths and amount of suffering from cancer, and that the tests will help more people than they will harm. As an extreme example, it should be clear that having surgery every year to look for cancer is not a good idea. Far more people would die as a result of side effects of surgery than would be saved by finding cancer early in a few people.

Although most people think of screening tests as harmless, that is not always the case. The tests themselves rarely cause serious side effects. But these tests are not 100% accurate and sometimes give a “false-positive” result. That means the test suggests that a person has cancer when, in fact, he or she does not. When that happens, people often have more tests or even surgery to determine whether cancer is really present. This can result in needless worry, side effects, or even death. So the ACS is very careful to balance the benefits against the drawbacks when we make recommendations about screening tests.

The ACS invites experts from the United States and around the world to participate in meetings where they consider all the facts about different tests and reach an agreement based on those facts. They look at published studies, ongoing research, and the recommendations of other health care organizations. There are several main issues these experts consider in reaching their decisions.

- Is there a good test for a given type of cancer? A screening test must not miss too many cases or, on the other hand, set off too many “false alarms.”

- How common is the cancer overall, and how common is it in each age group? For example, cervical cancer almost never occurs before age 21, so it would not make sense to recommend annual Pap tests for 10-year-old girls. In addition, some forms of cancer are very rare. So even if a test is relatively accurate and safe, if the cancer it is looking for is so rare that a million persons would have to be screened to find one case, the result would be too
many false positives (with associated side effects and dangers), and thus the drawbacks would outweigh the benefits.

- Does finding the cancer earlier save lives? Some tests can detect a cancer long before symptoms appear, but they cannot find the cancer early enough to make a difference in treatment options or survival. In these cases, the test would not be recommended.

Once the experts review all the evidence and discuss the issues thoroughly, they make their recommendations. These recommendations are called “Early Detection Guidelines.” These guidelines can be complex because they include information to help doctors recognize people at especially high risk for developing cancer, who might benefit from having screening at a younger age.

The following information describes the different screening tests the ACS recommends for men and women. It is a summary of the current ACS Guidelines. You can use this information to begin a discussion with your doctor about when and how often you should have the tests. The ACS recommendations change from time to time as new scientific evidence emerges, so it is always a good idea to talk to your doctor about which tests are right for you.

GUIDELINES FOR THE EARLY DETECTION OF CANCER

Guidelines for Women

Breast Cancer

Women aged 40 and older should have a mammogram and a clinical breast examination every year. A mammogram is a special kind of x-ray picture of the breast. A mammogram is the best method available today for finding breast cancer early. A clinical breast examination is a breast physical examination done by a health care provider. Between the ages of 20 and 39, women should have a clinical breast examination about every three years.

Women with a strong family history of breast cancer might begin having these checkups at a younger age, and they may consider other tests as well, such as magnetic resonance imaging (MRI). Talk to your doctor about your family medical history to learn more about your breast cancer risk and how you might be able to lower it.

Breast self-examination (BSE) is an option for women starting in their 20s. BSE is a step-by-step approach to examining the breasts that is done on a regular schedule. But research has shown that BSE plays a small role in finding breast cancer compared with finding a lump by chance. The important message is for women to be aware of how their breasts normally look and feel and not to ignore any changes they notice.

Cervical Cancer

Beginning about three years after a woman becomes sexually active (starts having vaginal intercourse), but no later than age 21, a woman should start having Pap tests.
With a Pap test, a doctor or health care provider takes a sample of cells from the cervix, or the opening of the uterus. These cells are then looked at in a laboratory for any changes that might point to a problem.

If the regular Pap test is used, it should be done every year. If the newer, liquid-based Pap test is used, it should be done every two years. Either test is okay to use.

Beginning at age 30, most women who have three normal tests in a row may have the test every two to three years. Most women 70 years and older who have had three or more normal Pap tests in a row (and no abnormal tests in the last 10 years) may choose to stop having the test. Women with certain cervical cancer risk factors (such as a weak immune system from human immunodeficiency virus [HIV] infection) should continue testing according to the usual schedule.

Women who have had a total hysterectomy (removal of the uterus and cervix) may also choose to stop cervical cancer screening unless the surgery was done as a treatment for cervical cancer or a precancer.

**Endometrial Cancer**

All women should be told about the risks and symptoms of endometrial cancer and encouraged to report any unexpected bleeding or spotting to her doctors.

Women who have (or who have a high risk for) hereditary nonpolyposis colon cancer (HNPCC) have a higher than average risk for developing endometrial cancer. (Both women and men with HNPCC are also at increased risk of developing colon cancer). Doctors should offer these women an endometrial biopsy each year beginning at age 35. The biopsy involves taking a small sample of cells from the endometrium (the lining of the upper part of the uterus). The sample is sent to the laboratory to determine whether cancer cells are present.

**Guidelines for Men**

**Prostate Cancer**

Men who are 50 and older should think about having two important tests for prostate cancer every year. The PSA blood test looks for abnormally high levels of prostate-specific antigen (PSA) in the blood, which can be a sign of problems in the prostate. The other test is a physical examination for nodules or firm areas in the prostate gland. Because the prostate gland is next to the rectum, the doctor inserts a gloved finger into the rectum to do this examination.

For men at high risk for prostate cancer, these two tests should begin at age 45. Men at high risk include African-American men and men who have a history of prostate cancer in close family members (such as their father or a brother) diagnosed before age 65. Men should ask their doctors about the risks and benefits of prostate cancer testing.
Guidelines for Both Men and Women

Colorectal Cancer

Testing for colorectal (colon and rectum) cancer should begin at age 50. Several different combinations of tests are available.

- A fecal occult blood test (FOBT) every year using a home kit. For the FOBT, samples of feces (stool) are tested for small amounts of blood that cannot be seen. Blood in the stool can be a sign of cancer.
- Flexible sigmoidoscopy performed every five years. The sigmoidoscope is a flexible tube that is about 2 feet long. The doctor inserts it into the rectum to look inside the colon.
- An FOBT every year plus flexible sigmoidoscopy done every five years. This combination is more accurate than either test alone.
- Colonoscopy performed every 10 years. Colonoscopy uses an instrument much like the sigmoidoscope, except the colonoscope is longer so the doctor can see the entire length of the colon. The patient can be given sedation before this test is done.
- Double-contrast barium enema done every five years. For this test, the colon is partially filled with barium sulfate, a chalky substance, through a small tube placed in the anus. When the colon is about half-full of barium, air is inserted to cause the colon to expand. This allows x-ray films to show abnormalities of the colon.

People should begin colorectal cancer screening earlier and/or undergo screening more often if they have any of the following colorectal cancer risk factors:

- a strong family history of colorectal cancer or polyps (cancer or polyps in a first-degree relative (parent, sibling, or child) younger than 60 or in two first-degree relatives of any age.
- a known family history of hereditary colorectal cancer syndromes (familial adenomatous polyposis and hereditary nonpolyposis colon cancer).
- a personal history of colorectal cancer or adenomatous polyps.
- a personal history of chronic inflammatory bowel disease.

Other Cancers

For people having periodic health examinations, a cancer-related checkup should include health counseling (such as information on quitting smoking) and, depending on a person’s age, possibly examinations for cancers of the thyroid, oral cavity, skin, lymph nodes, testes, and ovaries. Checkups for some nonmalignant diseases are also important.

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