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Treating Cancers in Young Adults

The main types of treatment for cancers in young adults are the same as those used in other age groups. The choice of treatment depends mainly on the type and stage (extent) of the cancer. Often more than one type of treatment is used.

- Types of cancer treatments
- The cancer treatment team
- Clinical trials

Older people are much more likely than younger people to get cancer, so most doctors who treat cancer (**oncologists**) see mainly older adults. Some doctors (**pediatric oncologists**) specialize in treating childhood cancers. Each type of doctor tends to work in an office or cancer center geared toward treating either older adults or children.

There are very few doctors who focus specifically on young adults with cancer, so it's not always clear which type of doctor (or treatment center) might be best. It often depends on the patient's age and the type of cancer they have.

- Young adults with cancers that are more common in children, such as <u>acute</u>
 <u>lymphocytic leukemia (ALL)</u>¹, <u>bone sarcomas</u>², and <u>rhabdomyosarcoma</u>³, are often
 best treated by (or at least with input from) pediatric oncologists, who have more
 experience with these types of cancers.
- On the other hand, young adults with "adult" cancers such as <u>breast cancer</u>⁴, <u>colorectal cancer</u>⁵, or <u>melanoma</u>⁶ are more likely to benefit from doctors who treat older adults and see these types of cancers more often.

Doctors tend to use more intense treatments when treating children with cancer than when treating adults. Children's bodies are often better able to recover from more

intense treatments (such as higher doses of chemo) than are adults' bodies. And in general, childhood cancers often respond better to chemo because they tend to be cancers that grow quickly (and chemo works better against fast-growing cancers.)

For some cancers (especially "childhood" cancers like ALL and bone sarcomas), the more aggressive treatments used for children have been found to improve outcomes for young adults as well, but for other cancers the results are not as clear. Again, this can depend on the patient's age and the type of cancer.

Types of cancer treatments

Cancer treatments in young adults are the same as those used in other age groups. Treatment depends mainly on the cancer <u>type</u>⁷ and <u>stage</u>⁸ (spread) of the cancer. It's important to discuss all of your treatment options, as well as their possible side effects, with your doctors to help make the decision that best fits your needs. Often more than one type of treatment is used.

Surgery

Surgery is a common treatment, especially for early stage cancers. The type of surgery depends on the type and location of the cancer.

Young adults have some advantages when it comes to surgery in that they usually have fewer health problems than older adults, and there are fewer concerns about anesthesia than there are with children. (Anesthesia is the use of drugs or gases to put you into a deep sleep and not feel pain.)

For more information, see Cancer Surgery9.

Radiation therapy

Radiation therapy is the use of high-energy rays (such as x-rays) or particles to kill cancer cells.

Young adults are less likely to have major side effects from radiation than children because their bodies are no longer growing as quickly. But many parts of the body can still be affected by radiation. Radiation can cause some late or long-term side effects years later. These are discussed in <u>Late and Long-term Effects of Cancer Treatment in Young Adults</u>¹⁰.

For more information, see <u>Radiation Therapy</u>¹¹.

A stem cell transplant, also known as a **bone marrow transplant**, is a way for doctors to give very high doses of chemo (sometimes along with radiation therapy). It's an option for treating some cancers, usually if other treatments are not working.

Without a stem cell transplant, the doses of chemo drugs are limited because they could severely damage the bone marrow, which is where new blood cells are made. This could lead to life-threatening infections, bleeding, and other problems because of low blood cell counts.

When a stem cell transplant is done, blood-forming stem cells are first collected from the blood or bone marrow of either the patient or from a matched stem cell donor. The stem cells are kept frozen while the patient gets very high doses of chemo (and sometimes radiation) to kill the cancer cells. Afterward, the stem cells are given into a vein much like a blood transfusion. They settle in the bone marrow and start making new blood cells over the next few weeks.

A stem cell transplant is a complex treatment that can cause serious, sometimes even life-threatening side effects. It often requires a lengthy hospital stay and can cost a lot. It's important to understand the possible benefits, risks, and costs of this procedure if it's an option.

For more information, see <u>Stem Cell Transplant for Cancer</u>¹⁷.

The cancer treatment team

You may have different types of doctors on your treatment team, depending on the type and stage of your cancer and your treatment options. These doctors might include:

- Cancer surgeons (sometimes called surgical oncologists): doctors who use surgery to treat cancer. Surgeons often specialize in treating a certain part of the body or a body system (such as the head and neck area or the digestive tract).
- **Medical oncologists:** doctors who use chemotherapy and other medicines to treat adults with cancer
- Pediatric oncologists: doctors who use medicines to treat cancers usually seen in children and teens
- Radiation oncologists: doctors who use radiation to treat cancer

Nurse practitioners (NPs) and **physician assistants (PAs)** are often an important part of the treatment team as well. These are nurses and other health professionals who are specially trained and licensed to practice medicine alongside doctors.

Many other health professionals might be involved in your care as well, including:

- Nurses
- Rehabilitation and physical therapists
- Nutritionists
- Social workers
- Other health professionals

These professionals can provide help and guidance with many issues facing young adults and their families, such as treatment effects on fertility, education or employment needs, health insurance concerns, family planning, and financial issues.

Clinical trials

Clinical trials are carefully controlled research studies that are done with patients who volunteer for them. They are used to learn more about promising new treatments or procedures.

Clinical trials are one way to get state-of-the art cancer treatment. Sometimes they may be the only way to get access to some newer treatments. They are also the best way for doctors to learn better ways to treat cancer. Still, they might not be right for everyone.

<u>Children's cancer centers</u>¹⁸ often conduct many clinical trials at any one time, and most children treated at these centers take part in a clinical trial as part of their treatment. This is one of the reasons why there has been great progress in treating many childhood cancers in recent decades.

Overall, adults are less likely to take part in clinical trials, and h inssBecad many

Hyperlinks

- 1. www.cancer.org/cancer/types/acute-lymphocytic-leukemia.html
- 2. <u>www.cancer.org/cancer/types/bone-cancer.html</u>
- 3. www.cancer.org/cancer/types/rhabdomyosarcoma.html
- 4. www.cancer.org/cancer/types/breast-cancer.html
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- 16. www.cancer.org/cancer/managing-cancer/treatment-types/immunotherapy.html
- 17. <u>www.cancer.org/cancer/managing-cancer/treatment-types/stem-cell-transplant.html</u>
- 18. <u>www.cancer.org/cancer/survivorship/children-with-cancer/finding-treatment/pediatric-cancer-centers.html</u>
- 19. <u>www.cancer.org/cancer/managing-cancer/making-treatment-decisions/clinical-trials.html</u>

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