Ovarian Cancer

Ovarian cancer is a disease in which malignant or cancerous cells are found in the ovaries. An ovary is one of two small, almond-shaped organs located on each side of the uterus that store eggs or germ cells and produce female hormones estrogen and progesterone.

Cancer Basics
Cancer develops when cells in a part of the body (in this case the ovary) begin to grow out of control. Although there are many kinds of cancer, they all start because of out-of-control growth of abnormal cells.
Normally, cells in your body divide, and form new cells to replace worn out or dying cells and to repair injuries. Because cancer cells continue to grow and divide, they are different from normal cells. Instead of dying, they outlive normal cells and continue to create new abnormal cells forming a tumor. Tumors can put pressure on other organs lying near the ovaries.

Cancer cells sometimes can travel to other parts of the body where they begin to grow and replace normal tissue. This process, called metastasis, occurs as the cancer cells move into the bloodstream or lymph vessels of our body. Cancer cells that spread from other organ sites (such as breast or colon) to the ovary are not considered ovarian cancer

There are many types of tumors that can start in the ovaries. Some are benign, or noncancerous, and the patient can be cured by surgically removing one ovary or the part of the ovary containing the tumor. Some are malignant or cancerous. The treatment options and the outcome for the patient depend on the type of ovarian cancer and how far it has spread before it is diagnosed.

What is the general outlook for women diagnosed with ovarian cancer?
In women age 35-74, ovarian cancer is the fifth leading cause of cancer-related deaths. An estimated one woman in 71 will develop ovarian cancer during her lifetime. The American Cancer Society estimates that there will be over 22,000 new cases of ovarian cancer diagnosed this year and that more than 15,000 women will die from ovarian cancer this year.
When one is diagnosed and treated in the earliest stages, the 5-year survival rate is over 90%. Due to ovarian cancer's non-specific symptoms and lack of early detection tests, only 19% of all cases are found at this early stage. If caught in stage III or higher, the survival rate can be as low as 30.6%. Due to the nature of the disease, each woman diagnosed with ovarian cancer has a different profile and it is impossible to provide a general prognosis.

Source: American Cancer Society

Symptoms

Symptoms of Ovarian Cancer

Ovarian cancer is difficult to detect, especially, in the early stages. This is partly due to the fact that these two small, almond shaped organs are deep within the abdominal cavity, one on each side of the uterus. These are some of the potential signs and symptoms of ovarian cancer:
Bloating
Pelvic or abdominal pain
Trouble eating or feeling full quickly
Feeling the need to urinate urgently or often

Other symptoms of ovarian cancer can include:
Fatigue
Upset stomach or heartburn
Back pain
Pain during sex
Constipation or menstrual changes
If symptoms persist for more than two weeks, see your physician.

Persistence of Symptoms
When the symptoms are persistent, when they do not resolve with normal interventions (like diet change, exercise, laxatives, rest) it is imperative for a woman to see her doctor. Persistence of symptoms is key. Because these signs and symptoms of ovarian cancer have been described as vague or silent, only around 19% of ovarian cancer is found in the early stages. Symptoms typically occur in advanced stages when tumor growth creates pressure on the bladder and rectum, and fluid begins to form.
A rectovaginal pelvic examination is when the doctor simultaneously inserts one finger in the rectum and one in the vagina.
It is helpful to take a mild laxative or enema before the pelvic exam.
Have a comprehensive family history taken by a physician knowledgeable in the risks associated with ovarian cancer. 5% to 10% of ovarian cancer has a familial link.
Every woman should undergo a regular rectal and vaginal pelvic examination. If an irregularity of the ovary is found, alternatives to evaluation include transvaginal sonography and/or tumor markers. The most common tumor marker is a blood test called the CA-125.

Types & Stages of Ovarian Cancer

Types of Ovarian Cancer

There are more than 30 different types of ovarian cancer which are classified according to the type of cell from which they start. Cancerous ovarian tumors can start from three common cell types:

Surface Epithelium - cells covering the lining of the ovaries
Germ Cells - cells that are destined to form eggs
Stromal Cells - Cells that release hormones and connect the different structures of the ovaries
Common Epithelial Tumors - Epithelial ovarian tumors develop from the cells that cover the outer surface of the ovary. Most epithelial ovarian tumors are benign (noncancerous). There are several types of benign epithelial tumors, including serous adenomas, mucinous adenomas, and Brenner tumors. Cancerous epithelial tumors are carcinomas - meaning they begin in the tissue that lines the ovaries. These are the most common and most dangerous of all types of ovarian cancers. Unfortunately, almost 70 percent of women with the common epithelial ovarian cancer are not diagnosed until the disease is advanced in stage.

There are some ovarian epithelial tumors whose appearance under the microscope does not clearly identify them as cancerous. These are called borderline tumors or tumors of low malignant potential (LMP tumors).

Epithelial ovarian carcinomas (EOCs) account for 85 to 90 percent of all cancers of the ovaries. We must continue research and expand our knowledge about this group of cancers in order to improve treatment and save lives.

Germ Cell Tumors - Ovarian germ cell tumors develop from the cells that produce the ova or eggs. Most germ cell tumors are benign (non-cancerous), although some are cancerous and may be life threatening. The most common germ cell malignancies are maturing teratomas, dysgerminomas, and endodermal sinus tumors. Germ cell malignancies occur most often in teenagers and women in their twenties. Today, 90 percent of patients with ovarian germ cell malignancies can be cured and their fertility preserved.

Stromal Tumors - Ovarian stromal tumors are a rare class of tumors that develop from connective tissue cells that hold the ovary together and those that produce the female hormones, estrogen and progesterone. The most common types are granulosa-theca tumors and Sertoli-Leydig cell tumors. These tumors are quite rare and are usually considered low-grade cancers, with approximately 70 percent presenting as Stage I disease (cancer is limited to one or both ovaries).

Primary Peritoneal Carcinoma

The removal of one's ovaries eliminates the risk for ovarian cancer, but not the risk for a less common cancer called Primary Peritoneal Carcinoma. Primary Peritoneal Carcinoma is closely rated to epithelial ovarian cancer (most common type). It develops in cells from the peritoneum (abdominal lining) and looks the same under a microscope. It is similar in symptoms, spread and treatment.

Stages of Ovarian Cancer

Once diagnosed with ovarian cancer, the stage of a tumor can be determined during surgery, when the doctor can tell if the cancer has spread outside the ovaries. There are four stages of ovarian cancer - Stage I (early disease) to Stage IV (advanced disease). Your treatment plan and prognosis (the probable course and outcome of your disease) will be determined by the stage of cancer you have.

Following is a description of the various stages of ovarian cancer:

Stage I - Growth of the cancer is limited to the ovary or ovaries.

Stage IA - Growth is limited to one ovary and the tumor is confined to the inside of the ovary. There is no cancer on the outer surface of the ovary. There are no ascites present containing malignant cells. The capsule is intact.

Stage IB - Growth is limited to both ovaries without any tumor on their outer surfaces. There are no ascites present containing malignant cells. The capsule is intact.

Stage IC - The tumor is classified as either Stage IA or IB and one or more of the following are present: (1) tumor is present on the outer surface of one or both ovaries; (2) the capsule has ruptured; and (3) there are ascites containing malignant cells or with positive peritoneal washings.

Stage II - Growth of the cancer involves one or both ovaries with pelvic extension.

Stage IIA - The cancer has extended to and/or involves the uterus or the fallopian tubes, or both.

Stage IIB - The cancer has extended to other pelvic organs.

Stage IIC - The tumor is classified as either Stage IIA or IIB and one or more of the following are present: (1) tumor is present on the outer surface of one or both ovaries; (2) the capsule has ruptured; and (3) there are ascites containing malignant cells or with positive peritoneal washings.

Stage III - Growth of the cancer involves one or both ovaries, and one or both of the following are present: (1) the cancer has spread beyond the pelvis to the lining of the abdomen; and (2) the cancer has spread to lymph nodes. The tumor is limited to the true pelvis but with histologically proven malignant extension to the small bowel or omentum.

Stage IIIA - During the staging operation, the practitioner can see cancer involving one or both of the ovaries, but no cancer is grossly visible in the abdomen and it has not spread to lymph nodes. However, when biopsies are checked under a microscope, very small deposits of cancer are found in the abdominal peritoneal surfaces.

Stage IIIB - The tumor is in one or both ovaries, and deposits of cancer are present in the abdomen that are large enough for the surgeon to see but not exceeding 2 cm in diameter. The cancer has not spread to the lymph nodes.

Stage IIIC - The tumor is in one or both ovaries, and one or both of the following is present: (1) the cancer has spread to lymph nodes; and/or (2) the deposits of cancer exceed 2 cm in diameter and are found in the abdomen.

Stage IV - This is the most advanced stage of ovarian cancer. Growth of the cancer involves one or both ovaries and distant metastases (spread of the cancer to organs located outside of the peritoneal cavity) have occurred. Finding ovarian cancer cells in pleural fluid (from the cavity which surrounds the lungs) is also evidence of stage IV disease.

These statistics, and the information regarding tumor stage and grade, demonstrate that there is a critical need to establish an agenda for more research into the areas of basic and translational research, genetic susceptibility and prevention, diagnostic imaging, screening and diagnosis, and therapy. These could hold the most promise for future discoveries that will lead to improved prevention, detection, and treatment of ovarian cancer, particularly the common epithelial cancers.

For more information on ovarian cancer grading and staging, visit CancerSource, the National Cancer Institute, MD Anderson Hospital, or the Oncology Channel.

Risk Factors

While the presence of one or more risk factors may increase a woman's chance of getting ovarian cancer, it does not necessarily mean she will get the disease. A woman with one or more risk factors should be extra vigilant in watching for early symptoms. Risk factors include:

Genetic predisposition
Personal or family history of breast, ovarian or colon cancer
Increasing age
Undesired infertility
Facts
All women are at risk
Symptoms exist - they can be vague, but increase over time
Early detection increases survival rate
A Pap test DOES NOT detect ovarian cancer
Recommendations
Current recommendations for management of women at high risk for ovarian cancer are summarized below:

Women who appear to be at high risk for ovarian or breast cancer should undergo genetic counseling and, if the risk appears to be substantial, may be offered genetic testing for BRCA1 and BRCA2.
Women who wish to preserve their reproductive capacity can undergo screening by transvaginal ultrasonography every 6 months, although the efficacy of this approach is not clearly established.
Oral contraceptives should be recommended to young women before they embark on a planned family.
Women who do not wish to maintain their fertility or who have completed their family may undergo prophylactic bilateral salpingooophorectomy. The risk should be clearly documented, preferably established by BRCA1 and BRCA2 testing, before oophorectomy. These women should be counseled that this operation does not offer absolute protection because peritoneal carcinomas occasionally can occur after bilateral oophorectomy.
In women who also have a strong family history of breast cancer, annual mammography screening should be performed beginning at age 30 years.
Women with a documented HNPCC syndrome, also called Lynch syndrome, should undergo periodic screening mammography, colonoscopy, and endometrial biopsy.

Prevention

Can Ovarian Cancer be Prevented?

At present, there is no known method to prevent ovarian cancer, but some things appear to reduce a woman's risk of developing the disease. They include:

Oral contraception: Birth control pills reduce the risk of ovarian cancer especially among women who use them for several years. Compared with women who never used oral contraceptive, those who used oral contraceptives for 3 years or more have about a 30%-50% lower risk of developing ovarian cancer.
Breast feeding and pregnancy: Having one or more children, particularly if the first is born before age 25, and breast feeding may decrease a woman's risk.
Tubal ligation: This is a surgical procedure in which the fallopian tubes are tied to prevent pregnancy. This procedure reduces the relative risk of developing ovarian cancer. Its use as a risk reduction strategy may be appropriate for high risk individuals and should be discussed with your physician.
Hysterectomy: A Hysterectomy has been demonstrated to reduce the relative risk of ovarian cancer. A woman should not have a hysterectomy exclusively to avoid the risk of ovarian cancer, but if one is being performed for valid medical reasons and she has a family history of ovarian or breast cancer or is over age forty, she should discuss concurrent ovary removal with her physician.
Prophylactic oophorectomy: Oophorectomy is the surgical removal of one or both ovaries. Only recommended for certain high-risk patients, the operation eliminates the risk for ovarian cancer, but not the risk for a less common cancer called Primary Peritoneal Carcinoma. This cancer is similar to ovarian cancer in spread, presentation and treatment. Discussion with your physician is necessary to determine your individual risk and options for prophylactic surgery.

FAQs

What do cancer "grading" and cancer "staging" mean? Why are these important?
For a complete diagnosis, your doctor will need to determine the cellular features (grade) of your cancer and also how much your cancer has grown and spread in your body (stage). Grade

is important because the visible characteristics of the cells are often correlated with how these cells behave and how aggressively they will grow. Knowing the stage of your cancer is important because it provides important prognostic information. Early stage cancers may be more treatable with surgery and chemotherapy, whereas later-stage cancers may need more aggressive treatment and long-term care. Both stage and grade are assigned at the first surgical intervention and never change throughout the patient's course of disease.

What is a CA 125 test? Can it be used for diagnosis?

CA 125 is a substance shed by cancer cells that is also made by inflamed normal cells that line body parts. This substance is shed into bodily fluids and finds its way into the blood stream. A CA 125 assessment is performed on a sample of your blood. The assay measures the concentration of CA 125 in the liquid portion of your blood (serum).
CA 125 testing is best used for monitoring changes that might happen in your cancer growth over time.

Please note: Approximately 20% of women who have ovarian cancer never have elevated CA 125 levels. Also, some women have naturally elevated levels of CA 125, so this protein does not necessarily mean that cancer is present. That is why it is critical to use CA 125 only as part of a diagnostic and monitoring regimen.

Is surgery necessary for cancer assessment?

Most women with ovarian cancer will have surgery at some point during the course of their disease, and each surgery has different goals:

Initial surgery (for diagnosis and treatment)

Initial surgery: technique

Usually performed by laparotomy, a surgery that involves a vertical (up and down) incision in the abdomen that is large enough to allow the surgeon to look inside the body and remove cancerous tissue
Sometimes includes debulking, which is described as removal of all visible cancer. In addition, it also involves removal of one or both ovaries and fallopian tubes (salpingo-oopharectomy) and often the removal of the uterus (hysterectomy). It is important that a gynecologic oncologist is the leader of the surgical team, as prognosis is closely related to how much of the cancer cannot be removed during surgery.

Goal: diagnosis

Obtain an accurate surgical diagnosis, which is crucial for planning an appropriate treatment strategy
Determine how far the cancer has spread ("staging" the cancer)
Obtain a biopsy sample to analyze the cellular characteristics of the cancer

Goal: treatment

"Debulking" to remove as much of the cancer tissue as possible
Optimal debulking of the tumor in women with bulky disease can improve outcome

"Second-look" surgery (a follow-up for women whose cancer responds to chemotherapy; not performed routinely)

Second-look surgery: techniques

Laparotomy
Laparoscopy
- Surgery using fiberoptic scopes and tubes
- Less invasive (can be performed through small [= 1 inch] incisions in the abdomen)
-
Goal: diagnosis

To investigate whether any cancer remains in the abdominal cavity and will require further treatment
- The role of second-look surgery in disease management is evolving, and this technique might be replaced by other, less-invasive assessment methods

Additional debulking surgery

Goal: treatment

To reduce cancer symptoms and improve the effects of chemotherapy

Surgery for recurrent ovarian cancer

To remove measurable disease after a reasonable disease-free interval
To remove bowel or ureteral obstruction

Radiation therapy

Radiation therapy uses high-energy x-rays to kill cancer cells and shrink tumors (only rarely used in the treatment of ovarian cancer in the United States).

Chemotherapy

Chemotherapy (often referred to as "chemo") involves using chemicals (medications) that travel through the bloodstream to destroy cancer cells or stop them from growing both in and outside the ovaries. Chemotherapy is used in the majority of cases as a follow-up to surgery. However chemotherapy is sometimes used before surgery (also called neoadjuvant chemotherapy) with the aim of shrinking a tumor and making it easier to remove all of the cancer.

Immunotherapy

Currently, this is experimental and only available as part of a clinical trial (see clinical trial section in Medical Information)

Therapy for Relapsed, Resistant, or Recurrent Ovarian Cancer

After first therapy for ovarian cancer, cancer may be cured completely, return (relapsed or recurrent cancer), or continue to grow (resistant cancer). Unfortunately, the majority of patients with advanced-stage ovarian cancer experience progression of their disease, even after response to first-line therapy. However, relapsed, resistant, or recurrent disease does not mean that cancer has defeated you. There are many effective therapy options available to women whose cancer remains or returns after their first round of therapy. An important consideration when selecting a therapy plan for recurrent ovarian cancer is how well your cancer responded to

previous treatments (usually platinum-based therapies). This information provides insight into how sensitive your cancer is to particular classes of chemotherapy agents. Both surgery and chemotherapy may play a role in the treatment of recurrent ovarian cancer. Surgery may be beneficial, especially if there was more than a 1-year remission after initial treatment. In addition, surgery may be needed in cases of intestinal obstruction. Cancers that are resistant to treatment with platinum-based agents are generally very aggressive, but they may still be responsive to treatment with other chemotherapy agents.

Cumulative toxicities are long-term effects on your body from exposure to chemotherapy agents. Because the cumulative toxicity of chemotherapy agents is an important consideration for women with relapsed or recurrent disease, you might want to discuss the concept of long-term treatment planning with your doctor. You should discuss the differences between acute (intense and short-term) and cumulative toxicities with your health care team. Many women with ovarian cancer experience multiple relapses and receive several rounds of chemotherapy. It is important to work with your health care team to minimize the effects of cumulative toxicities on your quality of life and your future treatment options.

Is there a link between ovarian cysts and ovarian cancer?

The normal ovary produces a normal physiologic cyst with each menstrual cycle in women during the reproductive years (ages 12-52). During menarche, as well as during the peri-menopause period, this normal process occurs less frequently. The normal cyst or follicle contains the egg or ovum and usually is less than 3 cm. in size. After ovulation, this cyst persists in the form of a corpus luteum and is also normal and physiologic. These cysts are rarely greater than 5 cm., resolve with each menstrual cycle, are simple in appearance, and are not suggestive of ovarian cancer. Cysts that persist throughout multiple cycles, are 6 cm. or larger, are complex, or are formed during childhood or after menopause are considered abnormal. However, the vast majority of these are benign. Further diagnostic evaluation of this group of cysts is warranted, as a very small fraction may be ovarian cancer.

How common is ovarian cancer?

According to the American Cancer Society, ovarian cancer ranks fifth in cancer deaths among women, but accounts for more deaths than any other cancer of the female reproductive system. It is estimated that there will be about 15,000 deaths from ovarian cancer in the United States annually, a rate that has changed little in the last 50 years. It is estimated that about 22,000 new cases of ovarian cancer will be diagnosed in the United States annually.

What is a low malignant potential tumor?

A Low Malignant Potential Tumor is a tumor of intermediate capacity to recur and to metastasize (spread). Usually if these tumors recur, they recur very late in time and usually in only one or a few sites as opposed to multiple and early metastatic disease.
Why does chemotherapy often cause unpleasant side effects?

Because chemotherapy agents typically circulate throughout the body in the blood stream, your entire body is exposed to them. Chemotherapy agents are targeted poisons that affect cells that are rapidly growing and dividing, two important characteristics of cancer cells. However, some normal cells, such as those that line your digestive tract and those that generate your blood cells, need to grow and divide rapidly for your body to function normally, fight infections, and recover from injuries. These rapidly dividing normal cells can also be adversely affected by chemotherapy agents. Therefore, many chemotherapy agents can cause unpleasant side

effects. It is important to speak with your oncologist because there are treatments and strategies to minimize these side effects.

What are the common side effects of chemotherapy?

Chemotherapy agents typically target cells that are growing and dividing rapidly. The cells that line your digestive system, make your hair, and fight viruses and bacteria typically grow at a very rapid rate and are often affected by chemotherapy agents. Therefore, patients who are receiving chemotherapy often experience digestive problems (nausea, indigestion, and diarrhea), hair loss and changes in the color and thickness of their hair, and decreases in immune system function (increased rate of infections). Other common effects include slower wound healing, anemia (reduction in the number of red blood cells, which transport oxygen throughout the body), and fatigue.
What steps can be taken to minimize side effects and maximize safety?
The most important safety instructions are to closely follow the directions given to you by your health care team and to ask them questions whenever something is not clear. Take all medication as directed, and consult with your health care team or pharmacist for direction if you miss a dose. Report all symptoms to your team, and update them if you have any changes in your other health conditions or prescription medications.

How were the standard chemotherapy regimens developed?

The standard therapies for ovarian cancer were isolated from plant extracts or are synthetic chemicals that were developed by pharmaceutical companies. These medications were tested in clinical trials in women with ovarian cancer, and only agents that displayed safety and anticancer activity received approval from the United States Food and Drug Administration. Once treatments receive approval, societies of clinical oncologists review the safety and activity information and develop recommended treatment guidelines.

Why are there many different therapies for ovarian cancer?

Because all women and all cancers are different, there are many different therapies for ovarian cancer. Except for identical twins, every person is genetically different. Everyone also has a different health history and diet and different sets of habits, allergies, and outlooks, so different people may react differently to available therapies. For example, women with kidney or liver disease may be less able to tolerate the standard first-line therapy for ovarian cancer. Alternate therapies may be needed to ensure safety. In addition, because ovarian cancers develop from a woman's normal ovarian tissue, everyone's cancer is as unique and different as they are. Therefore, not all of these cancers are expected to respond to the standard therapy.

How could participation in a clinical trial be beneficial for me?

Through participation in clinical trials, you may receive access to new and investigational therapy options that are not available to women outside the clinical trial setting. Clinical trial designs are all screened, approved, and monitored by national health authorities, and patients who enroll in clinical trials must be treated with the best available care. Participation in a clinical trial might also empower you by letting you know that your treatment experiences may pave the way to better care for women with ovarian cancer in the future.

Coping with Ovarian Cancer

Receiving a diagnosis of ovarian cancer from your doctor is just the beginning of a very personal and unique journey for you and your loved ones. This path can be scary at times, and will likely present a variety of emotional and physical challenges. One thing you should know is that you do not need to walk this path alone.

After being diagnosed with ovarian cancer, you probably will feel uncertain and have many questions about this disease. How will it affect my body and my life? What's the best plan of action to manage the disease? What treatment side effects will I experience? We have many resources to empower you with credible information that will answer your commonly asked questions. The more you know, the easier it will be to work well with your healthcare team, manage your cancer and make the best decisions for you.

Depression, Anxiety and Distress
"I just don't seem to enjoy things like I used to. I used to love a good movie - now they all seem to bore me and I just feel like sleeping."
"I can't seem to stop thinking about the cancer and what might happen. Even when I'm with other people and I'm having a good time, worries about the cancer pop into my head."

If these thoughts sound familiar to you, you are not alone. Having ovarian cancer is a stressful experience, and the ways you have previously coped with problems may not work as well when you are confronting a serious disease and difficult treatment. Many women with ovarian cancer report psychological distress; studies have found higher levels of anxiety and depression among women with ovarian cancer than among women who do not have cancer.

What Should You Do?

A good place to start is to talk about your worries and distress with a good friend or family member, or perhaps, you might consider joining a cancer support group. While you probably have many friends who want to help you, keep in mind that not everybody is a skilled listener. Some people may try to tell you that you shouldn't focus on your problems and that you need to have a positive attitude and be hopeful. While hope and a positive attitude are good things, it is important to address the underlying issues that are contributing to your negative mood, to help you gain more control over your feelings. All of your feelings about your cancer experience are real and valid, including negative feelings. Try to find a confidante who can really listen to you talk about how you are feeling, rather than telling you how you should be feeling!
In addition to talking about your distress, a number of other self-help techniques may help you deal with distress. Here are some for you to try:

Relaxation exercises: There are several relaxation techniques that, with practice, can help relieve your anxiety and improve your mood. Relaxation exercises generally involve deep breathing while imagining pleasant scenes or memories (guided imagery) or systematically tensing and relaxing muscles (progressive muscle relaxation). There are a number of books and tapes that can help you learn and practice relaxation exercises.
Exercise: Moderate exercise like brisk walking can also be helpful in managing stress and improving mood, but be sure to talk to your doctor to make sure that exercise is appropriate for you.

Get out and do something fun! Scheduling activities you enjoy, even when you're feeling down, can help improve your mood by distracting you from the stress you're experiencing. The activities don't have to be complicated or tiring, just simple things that you usually enjoy but haven't done as much since you got sick. For example, you could meet a friend for a cup of coffee, call a friend you haven't seen in a while, or go to the store and buy yourself some flowers. Picking activities that would force you to do something intentional and active will be more likely to improve your mood than passive activities such as watching TV. Put your activities on a calendar or schedule so that you make sure you do them.

When More Help Is Needed

Sometimes women with ovarian cancer experience distress that is serious enough to warrant treatment. This is particularly true for women who have had episodes of depression or anxiety in the past, or whose physical symptoms are severe. If you find you are experiencing symptoms like sadness and depression, feeling worthless, a lack of enjoyment of activities that you usually find pleasurable, excessive crying, or feeling sad and depressed most days for two weeks or more, you should discuss this with your doctor or a mental health professional. If you find yourself thinking about hurting yourself or that you would be better off dead, you should talk to your doctor or call a local mental health crisis center right away. You should also seek help if you find that your worries or any symptoms you are having are interfering with your usual activities or your relationships with the people close to you. For example, if you are feeling so anxious about leaving the house that you can't work or participate in social activities you usually enjoy, you may have an anxiety disorder that needs further treatment.
Many cancer patients have found psychotherapy to be helpful; sometimes talking with an objective professional can be just the thing to help you gain the perspective and strength you need to cope with your particular situation. Your doctor may be able to recommend someone; you can also consult one of the websites listed below. There are proven treatments to help people deal with depression and anxiety; both medication and psychological or behavioral treatments have been found to be effective in relieving distress in cancer patients. If your doctor prescribes medication, be sure to take the medication as directed by your doctor. These medications often take six weeks or more to start to work. If you find, after giving the medication time to work, that it is not helping you or it is causing undesirable side effects, talk to your doctor. There are many different kinds of medication to help people with symptoms of psychological distress. Sometimes it takes a little while to find the one that works best for you.

Spirituality

When people hear the term "spirituality" they often think about religion. Spirituality has been defined as a person's sense of peace, purpose, and connection to other people and how a person views the meaning of life. A person's religious practice may be a way of expressing her spirituality although it is important to acknowledge that a woman may be very spiritual but not religious. Either way, a woman's spiritual perspective may help her cope with a life-changing event such as a diagnosis of ovarian cancer. Cancer affects every part of a woman's life - life at home, at work, with friends and with family. Some women may want their doctors to discuss spiritual concerns with them, while others may not. If your spiritual or religious beliefs influence the manner in which you make medical decisions, you should let your healthcare team know. You should expect that your doctor will respect your religious or spiritual views, regardless of whether you consider yourself to be spiritual/religious or not.
While researchers do not know for sure if spiritual and religious well-being are associated with a better quality of life, some experts believe that it may help a woman's positive mental attitude. This, in turn, may help her better cope with the disease and treatment process.

If religion or spiritual practices such as meditation are a normal part of your life, then you may find that you will seek this support on a regular basis during the diagnosis and treatment process. Likewise, if you want to speak to someone about spiritual or religious concerns but do not have access to these individuals, let your hospital social worker know or speak with a member of your health care team to ask how you can contact a hospital chaplain, clergy, rabbi or support group that addresses spiritual concerns during illness.

In times of crisis, many women may turn to their church or temple for spiritual and social support to help cope with the day-to-day concerns of living with ovarian cancer. The NCI states that "Spirituality is generally recognized as encompassing experiential aspects, whether related to engaging in these practices or to a general sense of peace and connectedness." Women may find strength in their religion or spiritual outlook; it may help them connect emotionally to other people in turn helping them cope with their disease and begin the healing process.

Resources

The following list includes self-help books that may assist in teaching skills to manage stress. If you are experiencing clinical levels of distress, you may need to see a mental health professional. The websites listed below provide information about qualified mental health professionals in your area.

Stress Management/Relaxation

The Relaxation & Stress Reduction Workbook (New Harbinger Self-Help Workbook) (Paperback) by Martha Davis, Elizabeth Robbins Eshelman, Matthew McKay Patrick Fanning, 2008, Sixth Edition.
Mindbody Cancer Wellness: A Self-Help Stress Management Manual (Paperback) 2003, by Morry D., Ph.D. Edwards
Mind-Body Unity: A New Vision for Mind-Body Science and Medicine (Hardcover) 2003 by Henry Dreher
Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain, and Illness (audio) 2008 by Kabat-Zinn JonBy Jon Kabat-Zinn.
Mood Management
Thoughts & Feelings: Taking Control of Your Moods and Your Life (Workbook Workbook) (Paperback) 2007 by Matthew McKay, Martha Davis, Patrick Fanning
Learned Optimism: How to Change Your Mind and Your Life 2006 by Martin E. P. Seligman.
Mind over Mood: Change How You Feel by Changing the Way You Think 1995, by Dennis Greenberger & Christine Padesky.

Websites

www.apos-society.org
The website for the American Psychosocial Oncology Society (APOS) offers a link to a new referral help line for individuals facing cancer and for caregivers. The referral program provides local counseling and support services throughout the United States, including psychiatrists, psychologists, nurses, and social workers trained to manage cancer-related distress. Click on Referral Help Line in the upper left corner of the screen when you access the home page website for APOS.
www.aamft.org

The website for The American Association for Marriage and Family Therapists provides access to a searchable database for locating licensed marriage and family therapists. Under the heading "Public," click on "Locate a Family Therapist Near You."

www.nationalregister.org
This website for the National Register of Health Service Providers in Psychology provides a searchable database for locating doctoral level psychologists throughout the United States and Canada. After accessing the website, click on the link under "Find a Psychologist." Begin searching by clicking on "Public."

www.thewellnesscommunity.org
Founded in 1982, The Wellness Community is an international non-profit organization dedicated to providing free support, education and hope to people with cancer and their loved ones. Through participation in professionally-led support groups, educational workshops, nutrition and exercise programs, and stress-reduction classes, people affected by cancer learn vital skills that enable them to regain control, reduce isolation and restore hope regardless of the stage of their disease. The Wellness Community provides support, education and hope for people with cancer at over 100 locations worldwide including 24 U.S. based and 2 international centers with 73 satellite and offsite programs and online at The Virtual Wellness Community.

Financial Concerns

Financial concerns can be a major source of stress for women diagnosed with ovarian cancer. Specifically, financial issues can be related to employment, health insurance and travel and hotel expenses if you choose to travel for some of your treatment. There may be some steps you can take to minimize some of the financial stress.

Employment

If you are currently employed, you may wonder how your diagnosis and treatment will affect your job and what impact this may have on co-workers. Fortunately, a diagnosis of cancer is considered a "disability" under the 1990 Americans with Disabilities Act (ADA). This law covers employees of the legislative branch of the U.S. Government, state and local government entities, employment agencies, labor unions and employers with more than 15 employees.
It is a good idea for you to check with the personnel or human resources department at your workplace to find out more about specific employment policies that may apply to you. You should be aware that certain situations exist in which the employer may not be required to provide accommodations. In addition, small employers are not subject to federal law (in these situations, check with your state's agencies, congressional representatives or senator to find out more about what policies are in place to protect you). For more information on the ADA, check with your local American Cancer Society office or on the web at www.cancer.org or the National Coalition for Cancer Survivorship at www.canceradvocacy.org for more information on the ADA.

Another federal law is the Family and Medical Leave Act of 1993 (FMLA). This law, along with certain state laws, stipulates that employees may take up to 12 weeks of medical leave during a 12-month period. The leave can be taken all at once or can be taken in different time allotments, depending on what the employer and employee agree upon. The FMLA does not require that employees receive salaries during medical leave; the law does provide that employees retain their job positions and all benefits.

Insurance

A lot of attention has been given to concerns about health insurance coverage for individuals diagnosed with cancer. Specific areas of concern include restrictions on where you can receive your cancer treatment, maximum dollar amount of insurance coverage provided, and fear of losing coverage. The key to managing these concerns is to understand your insurance plan. There are some things you can do to help de-mystify confusion about health insurance.
If you have insurance coverage through a group health insurance plan offered by your employer (or your spouse's employer):
Ask your plan's administrator or benefits representative for materials (e.g. booklet or website) that describes your insurance plan,
Obtain a copy of the actual plan from the insurer,
Read these documents very carefully, paying particular attention to exclusion policies,
Find out whether special requirements exist, i.e. pre-certification, claim submissions, extra costs for going out-of-network for doctors or hospitals, inpatient vs. outpatient coverage for certain treatments,
Find out whether clinical trials are covered (understand your plan's definition of "experimental" or "investigational" treatment), and
Be aware that federal and state laws exist to protect you from losing your insurance coverage.
If you have insurance through a government-sponsored program such as Medicare or Medicaid, you can log on to www.cms.hhs.gov or call (410) 786-3000 for more information.

If you do not have insurance coverage call the American Cancer Society office for available resources: 1-800-227-2345 (1-800-ACS-2345).

Since understanding and working with insurance plans can be extremely time-consuming and detail-oriented, ask a family member to help you manage this process; it is often helpful to have another person review the paperwork.

The National Coalition for Cancer Survivorship provides a downloadable PDF of a book entitled What Cancer Survivors Need to Know About Health Insurance on its website: www.canceradvocacy.org/resources/.

Social Security Disability Insurance
Some women may be unable to work due to progression of their ovarian cancer or because of continuous cancer treatment. These women may be eligible for Social Security Disability Insurance (SSDI). The SSDI pays monthly disability benefits to individuals who meet strict eligibility criteria. Specifically, Social Security must determine a woman's inability to work as she did before due to her ovarian cancer as well as her inability to work for at least 12 months. Monthly benefits are based upon the individual's income history. To learn more about Social Security Disability Insurance and whether you qualify, contact Social Security at 1-800-772-1213 or visit the website at www.ssa.gov and click "Disability and SSI."
Travel and Lodging
If you need to travel beyond your local area to receive treatment or get a second opinion, costs associated with travel (gasoline, airfare) and lodging (hotel and food) can add up quickly. If geography is a limiting factor and there are no gynecologic oncologists in your area, you may have to travel to have your surgery performed by a gynecologic oncologist. Your gynecologic oncologist may be able to coordinate your chemotherapy with a medical oncologist in your hometown.
Many top cancer centers are accustomed to out-of-town patients and have personnel on staff who assist with travel and lodging information and arrangements. These cancer centers often

have special arrangements for discounted airfare, car rental, and hotel rooms. Some centers even have onsite housing available.

Other resources include:
The American Cancer Society Hope Lodge Program www.cancer.org
National Association of Hospital Hospitality Houses www.nahhh.org
Hope Flight Foundation www.hopeflightfoundation.org
Air Care Alliance www.aircareall.org
Corporate Angel Network www.corpangelnetwork.org
National Patient Travel Center www.patienttravel.org
If you are considering a clinical trial but the location of the trial is far from where you live, ask the sponsor of the trial or check with your insurance plan to see if either will cover part/all of your travel costs.