

# HELPFUL NON-DENTAL HINTS

## A SMALL COSMETIC BAG holding

- Hand Sanitiser in small container and with Covid 19, a well-fitting N95 or level 3 mask.
- Lip balm/lipstick/Vaseline as lips become very dry
- Small make-up mirror or mirror as part of blusher
- Tablets your doctor recommends such as tablets for nausea, pain medication e.g. Panadol<sup>®</sup>, anti-diarrhoea can be prevented with Imodium<sup>®</sup> tablets etc. in a small easy identified small clutch bag.
- Thermometer so you can check for fevers – a sign of infection

## A LARGE BAG is needed WHENEVER YOU LEAVE THE HOUSE.

- Water bottle as stress of having treatment and effects of treatment will dry up or change the quality of your saliva.
- Notebook to place appointments in place as you may have a fuzzy brain and dealing with a lot of different medical, dental, and other therapy appointments.
- Covid -19 would also mean N95 or Level 2/3 facemasks and hand sanitiser.
- Sunscreen, hat or scarf and sunglasses – as skin and eyes are more sensitive to light.
- Scarf or pashmina to cover cold shoulders especially during chemotherapy treatment.
- Baby wipes to help clean up diarrhoea
- Tissues
- Gloves to clean up vomit or diarrhea if necessary
- Spare pair of pants and underwear
- Plastic bag to place soiled underwear and pants

## SHOES

Feet are at risk with chemotherapy. Some feet feel numb and some get swollen. GOOD FITTING SHOES may eliminate problems. Podiatrists may also be needed to help with their specialist knowledge of foot health. Frankie4<sup>®</sup> shoes tend to be a little more fashionable and will last well.

## HAIR LOSS:

YOUR ONCOLOGIST MAY TELL YOU THAT YOU WILL LOOSE YOUR HAIR DURING YOUR CHEMOTHERAPY TREATMENT and the week you will loose your hair.

When my daughter was told she would loose her hair on week 6 of her chemotherapy, I suggested that her very long locks should go short in a pixie style so her 3 year old boy would not become distressed with her large amounts of hair falling out especially in large clumps. The style was about 6cms long and looked great. Her son got use to her short hair

and when the inevitable happened, about 3 weeks later, all around her could accept that her nearly waist length blond hair was short and was now disappearing. Her hairdresser was wonderful and empathetic.

If your hair is long, some hairdressers can transform it into a wig. We bought a natural hair wig that my daughter wore when she went out to dinner. Nothing or a silk scarf on her head felt better walking around the house.

Her eyebrows and eyelashes also disappeared. We found eyebrow pencil helped to gain a little definition around her eyebrows and lashes when she socialised with her friends.

#### **FOR YOUR HOME:**

- Shower chair to sit in the shower when not feeling well. Can be cheap plastic chair. You would be surprised at how much energy it takes to stand in the shower for 10 minutes or sit up in the bathtub when you are fatigued. Shower chairs make bathing easy and take very little energy from the patient.
- A tray for your bed that can go over your legs so you can write in bed, play cards, use your laptop or even just to rest a cup of tea.
- Plenty of magazines and books so you do rest especially if you have young children.
- A TV in the bedroom for those times you do not feel well.
- Moisturiser for your face and hands as they generally become dry.
- Lip gloss also helps dry lips.
  
- Silk Pillowcase as this helps head feel more comfortable sleeping. It also helps to retain hair during chemotherapy. They are also easy to wash. May need two.
  
- Large make-up mirror to help place make-up, If your eyebrows are missing may need to pencil in eyebrows and eye lashes.
- Wig for going out... generally can feel uncomfortable on bare head. Natural hair is more expensive but is more comfortable. A foam head from overflow type shop will hold the wig in good shape and easier for styling.
- Scarf or head gear ...especially to answer your front door. Preferably silk for comfort.
  
- Recaldent<sup>®</sup> Sugar-free gum to help re-hydrate your mouth by stimulating your saliva as well as re-mineralising your teeth.
- ToothMousse<sup>®</sup> can be placed on teeth at night to help re-mineralize your teeth.
- GC Dry Mouth Gel<sup>®</sup> or Biotene<sup>®</sup> replacement saliva can all help your mouth feel less dry during your cancer treatment.
- Fluoride toothpaste
- Fluoride trays filled with high concentration of fluoride may help with decay. If you develop a high decay rate, Neurofluor Gel<sup>®</sup> with mandarin being the least offensive can be placed in "tooth whitening trays" at night for 10 minutes.
- Floss for better dental health
- Interdental brushes for a super clean every day.

- Appointments with your dentist every 3 months ....just to be sure! Dry mouth and lips are often a side effect of cancer treatment. Food sticks to your teeth more and rehydration with water is often a good remedy.
- Your dentist may suggest an occlusal splint to help with grinding your teeth (stress!)

**If you are vomiting a lot, just rinse mouth out with water.** Do not brush teeth straight away as your enamel will be soft from the acid attack for about 30 minutes. Chewing Recaldent® gum or swishing with Listerine® Zero broken down with water 50% may make your mouth feel fresher.

## **ACCEPT HELP FROM FAMILY AND FRIENDS**

### **Washing sheets:**

Your energy levels maybe low during treatment, so allow your family to change and wash your sheets every day especially during chemotherapy. Sometimes the sheets need to be washed twice and hung out in the fresh air as chemotherapy sweats will seep onto sheets.

### **Mowing the lawn:**

One of my daughter's best friends simply turned up and mowed the lawn. One less chore for her husband on his time off from work. Extremely thoughtful response to a family in need.

### **Food in a box:**

An esky out the front of the house allows people to help drop off dinner or snacks for the children if you are resting.

## **FOOD**

**M**y other daughter found an to help friends make meals. The app enabled family and friends to view the date, who was making dinner for that night as well as what they had planned. This meant her family did not have lasagne or spaghetti every day. Within three days, my daughter had endless help from her family and friends who made meals and treats for 3 months. In case my daughter was resting,

I organised a large esky to place the food into so the food was kept fresh and to keep insects at bay. All this help from her parent's friends to her friends from her children's local school and church really helped her family cope with dinners. Cancer chemotherapy treatment and lethargy make being a mother difficult. At least dinner was solved for the day.

Her children aged 6 and 10 looked forward to coming home from school and seeing the treats that were made for after school treats and their school lunch boxes.

### **Foods to avoid as a cancer patient = pregnancy diet**

- No oysters, sushi, or uncooked seafood.

- Un-pasteurized cheeses such as overseas Camembert or blue cheese
- Deep fried, grilled, barbequed, baked meats since subjecting animal protein to high heat creates carcinogenic by-products called heterocyclic amines
- Excessive intake of salt, sugar, and oily foods – may cause more diarrhoea.
- Red meat in moderation
- Processed meats such as bacon, ham, sausages etc – lots of preservatives
- Preserved foods like pickles, jams as they contain nitrites which are carcinogenic
- Minimal or no alcohol
- Limit soft drinks especially cola drinks as they have large acid content and will have an adverse effect on dry teeth if you suffer from a dry mouth caused by stress, chemotherapy drugs, radiation that may affect salivary gland production of quality and quantity of saliva.
- No smoking – direct carcinogen on your already compromised oral tissues, lungs etc.

#### **Excessive vitamins:**

Additionally, cancer patients should avoid excessive intake of vitamin supplements, as they act as antioxidants and can interfere with chemotherapy when taken in large doses. Large doses of Vitamin A have been linked to increased cancer risk significantly.

**Excessive carrots and other diets** may not only make you orange but could also not be helpful in your fight against cancer.

## **EXERCISE**

Correct exercise will make a difference to your mental agility as well as making your chemotherapy work better!

Your physiotherapist can help you achieve your physical achievement goals. Go for walks with a friend.

## **YOUR DENTIST SHOULD BE ONE OF YOUR CANCER CARE TEAM:**

**Your dentist will routinely look for oral cancer during your regular dental examinations.**

**White patches in your mouth:** White patches on the gums or tongue (called leukoplakia) could be an early symptom of oral cancers.

**Constant irritation with a sharp tooth** on the oral tissues or side of the tongue can over time cause cancer. Dentists can smooth off the sharp piece of the tooth and make sure the oral tissues return to a happy pink colour. Sometimes a filling or crown is required to rectify the tooth.

Smoking and drinking excessive alcohol were the prime culprits causing these mouth and throat cancers in the past, many are now believed to be caused by infections with the human papillomavirus (HPV).

Your dentist can show you with a variety of dental products that maybe helpful if you develop a dry mouth through stress, medications, or radiation side effects. Cancer patients should be seen either six monthly or three monthly for routine maintenance examinations, depending on the severity of dry mouth symptoms, amount of vomiting or reflux or a sudden very high decay rate.

## **YOUR DENTIST CAN HELP YOU**

- If grinding your teeth through stress you may need an OCCLUSAL SPLINT
- To get high fluoride next to your teeth you may need FLUORIDE TRAYS.

## **Importance of Dental Care During Cancer Treatment**

Chemotherapy and radiation treatment can have oral side effects, which may be temporary or long-term, such as soreness and ulcers in the mouth, gum infections, bleeding gums, dry mouth and altered taste and your dentist is best placed to advise on how to treat them. Patients at the highest risk of oral complications include those receiving radiation to the head and neck region, those who require bone marrow transplants, or patients receiving specific chemotherapy agents.

Treatment for blood and marrow cancers can cause changes to the tissues in your body, including those in your mouth. Whether you are receiving chemotherapy, radiation therapy, or a stem cell transplant, oral complications can cause big problems if not treated properly. In fact, these types of side effects can limit the doses of medications or the timing of your treatments. Therefore, taking care of your mouth and teeth together with regular dental examinations even every 3 months is an important part of your cancer care.

Cancer patients can be at a high risk of developing complications to their mouth and teeth, both as a result of their condition and the treatment of it.

**Your dentist can be an important part of your care during cancer therapy.**

## What Kinds of Mouth and Dental Problems Can Cancer Treatment Cause?

Cancer treatments affect both malignant cells as well as healthy ones. As with any side effect, certain therapies are harder on your mouth tissues than others and some people are more susceptible to these types of complications. These changes can lead to other complications, such as serious infection and decreased nutrition.

Treatment for different types of cancer may cause side effects including:

- Oral mucositis, or painful sores in your mouth or throat
- Taste of food can change – sometimes metal taste to everything sometimes like eating cardboard
- Xerostomia or dry mouth – sharp teeth can rub on tissues and cause cutting or trauma to your tongue, cheeks, and lips. Get your dentist to round off the sharp edges as excessive constant abrasion will cause eventual mouth cancer or at least a precancerous condition called leukoplakia or a white lesion to develop,
- Bleeding gums and tissues, especially if you have low platelets. You need great oral hygiene as your tissues are over-reactive to plaque. A professional scaling and polishing of your teeth at the right time designated by your oncologist will help.
- Tooth decay – dry mouth means your saliva does not wash away food particles and teeth are subject to more acid attack from foods and reflux (stomach acid). Some dental products may help as well as professional examination, cleaning of teeth and application of fluoride. At home, high fluoride toothpaste such as Colgate Neutrofluor 5000 sensitive toothpaste.
- Nerve pain – sometimes an occlusal splint or night guard can help.
- Changes to jaw muscles, which may restrict how well you can open your mouth (“trismus”) You may need a physiotherapist’s help as well.
- Osteonecrosis or “bone death” from changes to the blood vessels that supply the bones of your jaw.
- Impaired tooth development in children with cancer
- Radiation to the throat may lead to difficulty swallowing. Pulverising food maybe an option as well as high protein drinks.

## Your Dentist is part of your support team during Cancer Treatment.

Some of the dental problems that are caused by cancer treatment are unavoidable. However, with proper care and surveillance by a dentist, additional complications and treatment delays can be minimized. A dentist can help by:<sup>2</sup>

- Identifying potential problem areas, such as loose or ill-fitting dental appliances, undiagnosed cavities, or unhealthy gums
- Caring for infections in your mouth before they spread to your bloodstream
- Suggesting strategies for maintaining your oral hygiene during treatment with three monthly cleans and monitoring your teeth and tissues.
- Preventing complications that could lead to poor nutrition with some dietary advice.
- Helping you avoid oral complications that can cause delays in your chemotherapy treatment eg tooth abscess.
- Managing or preventing mouth pain as decay thrives with a sugar diet and a dry mouth stops saliva washing food away from teeth. ToothMousse® and Recadent® gum can help re-mineralize your teeth and GC Dry Mouth Gel® can all help your mouth feel less dry during your cancer treatment.
- Keeping your smile looking beautiful, even if you are not using it as much as usual.

It is important that you find a dentist who is knowledgeable about your cancer and its treatment. Your dentist should be in contact with your oncologist to coordinate care.

If you have known dental problems, or require any dental procedures, discuss the best timing and approach with your cancer specialist.

All patients with head and neck cancers who are scheduled to receive radiation to their oropharynx should see a dentist before starting radiation.

## **What Can You Do to Reduce Mouth and Dental Problems During Cancer Treatment?**

You also play a role in avoiding mouth problems during cancer treatment. Here are a few things you can do to prevent complications:

- Follow a good mouth care protocol
- Drink lots of water or stimulate saliva production with sugar-free candy or gum to minimize dry mouth
- Inspect the inside of your mouth daily for any changes, sores, or signs of infection
- Clean or rinse your mouth out after vomiting. Club soda or baking soda and water make great mouthwashes
- Prevent stiffness in your jaw muscles by exercising them! Stretch your mouth open as far as you can, then close it. Repeat several times each day
- Quit smoking and avoid alcohol during treatment

- Ask your doctor about fluoride treatments
- Request pain control for sore mouth and throat so you can keep up good nutrition

Remember that cancer patients may be at higher risk of dental problems for the rest of their lives.<sup>3</sup> Keeping up with dental care on a long-term basis is an important part of survivor care.

### **When to Contact Your Doctor**

You should call your specialist or nurse if you:

- Develop a fever
- Notice white patches or open sores in your mouth
- Have a painful mouth or throat, whether you can see a problem or not
- Notice your gums are bleeding
- Are experiencing a very dry mouth



## DENTAL PRODUCTS THAT MAY HELP

- Recaldent<sup>®</sup> Sugar-free gum help re-hydrate your mouth by stimulating your saliva as well as re-mineralising your teeth.
- ToothMousse<sup>®</sup> can be placed on teeth at night to help re-mineralize your teeth.
- GC Dry Mouth Gel<sup>®</sup>
- Biotene<sup>®</sup> replacement saliva can all help your mouth feel less dry during your cancer treatment.
- Biotene<sup>®</sup> toothpaste can help if tongue reacts to normal toothpaste.



## YOUR MEDICAL TREATMENT OPTIONS

Your oncology team understands your type of cancer and will personalise your treatment. Sometimes there is a team of specialists including oncologists, surgeons, and radiologists as well as dentists, psychiatrists, physiotherapists etc that come together as a team to discuss the best treatment options for their patient's personalised treatment options. Princess Alexandra Hospital has the Head and Neck Clinic meets weekly with my husband Chris Perry who is an ENT specialist (Otolaryngologist, Head and Neck Surgery) as its chairperson. The best treatments for cancer depend on the type and stage of the cancer and many other factors. **Every cancer is different on a molecular level, so two people with the same type and stage of cancer could have cancers that respond to treatments in different ways.**

Treatments for cancer can be separated into two main categories:

- **Local treatments** include surgery and radiation therapy. These treat a cancer where it began but are unable to reach cancer cells that may have travelled away from the primary cancer via the bloodstream or lymphatic system. When cancers are caught early, local treatments can often cure the cancer.
- **Systemic treatments** include chemotherapy, targeted therapies, hormonal therapies, and immunotherapy, and treat cancer cells wherever they happen to be in the body. Systemic therapies are usually needed if a cancer has spread (or if there is a chance it has spread) and for blood-related cancers.

Cancer treatment options may include:

- **Surgery:** For solid tumours, surgery often offers the best chance to cure a cancer.
- **Chemotherapy:** Chemotherapy refers to the use of cytotoxic chemicals to kill cancer cells.
- **Radiation therapy:** Radiation therapy uses high-energy radiation to kill cancer cells.
- **Targeted therapies:** Targeted therapies target cancer cells or processes important to cancer cells specifically.
- **Immunotherapy:** Immunotherapy is an exciting new treatment approach to cancer, taking into account that our immune systems often know how to fight cancer.
- **Hormonal therapies:** With some cancers, hormones produced naturally in the body can bind to and stimulate the growth of cancer cells. This may be prevented by decreasing the production of hormones in the body or by blocking the ability of the hormones to have these effects on cancer cells.
- **Stem cell transplant:** Stem cell transplants may be used following high-dose chemotherapy or radiation therapy to replace the blood cells in the bone marrow.

I have learnt too much about cancer! My immediate family has endured breast cancer that 7 years later presented with brain and lung metastatic cancers, one with bowel cancer, one with throat cancer, a close friend with ovarian and previous melanoma cancer – all in 2020!

**Chemotherapy and radiation treatment can have oral side effects**, which may be temporary or long-term, such as soreness and ulcers in the mouth, gum infections, bleeding gums, dry mouth and altered taste and your dentist is best placed to advise on how to treat them. Patients at the highest risk of oral complications include those receiving radiation to the head and neck region, those who require bone marrow transplants, or patients receiving specific chemotherapy agents. Regular three to six month dental examinations are advised to get the best oral health and to reduce any teeth and oral tissues problems fast.

**A small notebook is handy so you can have your many appointments in sequence.** A handy list containing your exact medications including naturopathic medications, with the dose and how many times taken during the day is helpful at your varying specialist and other cancer care professional appointments such as your dentist, dietician and sports therapist.

At your medical and dental appointments take a relative or friend so you can discuss later what the doctor “actually said during your visit. With the shock of diagnosis – two heads are better than one.

# Summing It Up

**Listen and do what your doctors recommend.**

**Engage with your doctor if you are feeling depressed and lonely.**

**Nutrition is important but do not go for the 3 kg carrots daily diet.**

**Get help from professionals including your dentist, physiotherapist, podiatrist, dietician and even good gym instructor to keep you in the best possible health despite the cancer treatment. Good health makes your body respond proportionately better to chemotherapy with exercise and a “pregnancy” type diet.**

**Smoking is not on your health agenda.**

**Respect people who want to help you in whatever way they can. This maybe just bringing you a take-away coffee and having a chat. It is hard to accept this change in your life.**

**Friends and family will need to love you and laugh with you. You will need their love and support. Be brave but do accept their help.**

## PRODUCTS THAT MAY HELP.

As long as you are not allergic to milk as these products contain caesian.

- Recaldent<sup>®</sup> Sugar-free gum help re-hydrate your mouth by stimulating your saliva as well as re-mineralising your teeth.
- Tooth Mousse Plus<sup>®</sup> can be placed on teeth at night to help re-mineralize your teeth.
- GC Dry Mouth Gel<sup>®</sup> or Biotene<sup>®</sup> replacement saliva can all help your mouth feel less dry during your cancer treatment.



## Colgate<sup>®</sup> NeutraFluor 220 Alcohol Free Mouthwash

Colgate Neutrafluor 220 Mouthwash 0.05% w/v neutral sodium fluoride (220 ppm)

Colgate Neutrafluor 220 Mouthwash (220 ppm F) is formulated to assist in the prevention of dental caries in children over 6 years and adults when used on a daily basis. May be particularly useful during orthodontic treatment or for management of patients with moderate caries risk.

- For prevention of root and enamel caries
- Provides protection against enamel decalcification
- Safe for use with ceramics and glass based restorations



Colgate Neutrafluor 220 has a pleasant mint flavour and an easy to use measuring cap.

**NEUTRAFLUOR® 5000 Sensitive Toothpaste** for individuals with sensitive teeth and at high risk of caries, as recommended by a dentist or doctor.



**DIRECTIONS FOR USE:** Adults and children 12 years and older: Use daily in place of regular toothpaste or as directed by a dentist or doctor. Children under 12 years should not use. However, if recommended for children under 12 years, use with adult supervision. Apply a thin ribbon of NeutraFluor 5000 Sensitive to a soft toothbrush and brush teeth thoroughly for two minutes. After use spit out excess toothpaste and refrain from eating, drinking or rinsing for 30 minutes.

**WARNINGS:** DO NOT SWALLOW. Keep out of reach of infants and children. Note: Sensitive teeth may indicate a serious problem that may need prompt care

### **Biotène® DRY MOUTH ORAL RINSE**

*Biotène® Dry Mouth Oral Rinse is specially formulated to provide immediate Dry Mouth symptom relief that lasts for up to 4 hours\* while it freshens your breath.*

When used as part of your daily oral health care routine, it is an ideal oral rinse for managing your Dry Mouth symptoms. It contains a mouth-moisturizing system to provide soothing, lubricating relief and its gentle, alcohol-free formula refreshes your mouth, while helping to keep it clean, to maintain a healthy mouth.

\*As measured in a 28-day clinical study

- Biotène® DRY MOUTH ORAL RINSE
- Soothes and moisturizes for up to 4 hours\*
- Freshens breath
- Alcohol-free and sugar-free
- Provides a balanced pH
- Can be used up to five times a day



For best results, use approximately 15 mL (one tablespoon) of Biotène® Dry Mouth Oral Rinse, rinse for 30 seconds and then spit out. You can use Biotène® Dry Mouth Oral Rinse up to 5 times a day depending on your needs. Use alone or after each time you brush.\*\*

## Biotène® Dry Mouth Gentle Oral Rinse

Specially formulated for a dry mouth prone to irritation



## **Biotène® FRESH MINT TOOTHPASTE.**

Protects against cavities, freshens breath and is free of sodium lauryl sulfate (SLS).

**From the ADA.org.au website: AUSTRALIAN DENTAL ASSOCIATION WEBSITE.**

Being diagnosed with cancer is arguably one of life's most traumatic events. You will be given a lot of information about your treatment options so it is understandable that the first thing you think of will not be how your mouth and teeth will be affected.

But it is important that you speak to your dentist about your diagnosis. Your dentist can assess the health of your teeth and mouth in the context of proposed cancer treatment(s) and determine if any dental work, by themselves or a specialist, is needed before you commence your treatment.

Chemotherapy and radiation treatment can have oral side effects, which may be temporary or long-term, such as soreness and ulcers in the mouth, gum infections, bleeding gums, dry mouth and altered taste and your dentist is best placed to advise on how to treat them. Patients at the highest risk of oral complications include those receiving radiation to the head and neck region, those who require bone marrow transplants, or patients receiving specific chemotherapy agents.

### **Oral health side effects**

One main oral side effect you may notice is xerostomia, more commonly known as dry mouth. This condition is the result of damage to your salivary glands caused by chemotherapy or radiation therapy treatments, and adverse effects from medicines.

You'll find that your saliva is less abundant and thicker, and less able to neutralise the acids

produced by dental plaque, which puts you at increased risk of tooth decay. You may also find you suffer from more sores and mouth infections, such as oral thrush.

A dry mouth may also make it difficult to wear dentures. Your dentist will be able to suggest a moisturiser or adhesive to help your denture stay in place.

### **Managing dry mouth**

The good news is that you may be able to relieve the symptoms of dry mouth. You should consult your dentist prior to commencing treatment to determine which dental products, such as saliva substitutes, mouth-rinses to fight infection and products that stimulate the salivary glands, will work best for you.

Once your treatment is completed your dentist may recommend that you use specific fluoride rinses and gels, high concentrated fluoride toothpastes, and other products designed to help you lower the risk of tooth decay.

### **After treatment**

Oral side effects such as dry mouth usually clear up after treatment although this may not be the case if you've had radiation treatment for head and neck cancers. Symptoms may persist into the long-term however, especially if your treatment was directed at the salivary glands, in which case you should see your dentist more regularly than usual, possibly as frequently as every 3 months.

ADA website 2020.

## **Frequent Symptoms**

While it's important to remember that each of the most common symptoms of cancer can have other causes, it's best to talk to your doctor about any that you experience.

These are the 14 most common symptoms of cancer:

- Unintentional or unexplained weight loss
- Lumps, bumps, or enlarged lymph nodes
- Night sweats
- Abnormal vaginal bleeding
- Changes in your bowel movements
- Blood in your stool or rectal bleeding
- Persistent cough
- Shortness of breath
- Pain occurring anywhere in your body, especially a pain felt as a deep ache
- Persistent, severe fatigue
- Skin changes
- Abdominal swelling or bloating
- Blood in your urine
- Difficulty swallowing



**DENTISTS EXAMINE YOUR MOUTH AND LIPS FOR EVIDENCE OF CANCER at every appointment.**

**White patches in your mouth:** White patches on the gums or tongue (called leukoplakia) could be an early symptom of oral cancers, and many doctors now routinely screen for this during regular dental exams. Whereas smoking and drinking were the prime culprits causing these cancers in the past, many are now believed to be caused by infections with the human papillomavirus (HPV).<sup>22</sup>

Your gut feeling can be an important "early symptom" of cancer. Upon learning of their diagnosis of cancer, many people state that they knew something was wrong. A large 2016 study confirmed this finding, at least with colorectal cancer. The third most commonly reported symptom prior to diagnosis was "feeling different."

Some of these symptoms are specific to certain types of cancer, while others may occur in several types.

### **Unexplained Weight Loss**

Unintentional weight loss is defined as the loss of 5% of body weight over a six- to 12-month period without trying. This is equivalent to a 130-pound woman losing 6 or 7 pounds, or a 200-pound man losing roughly 10 pounds of weight. Though many people may welcome dropping a few pounds, it is important to see your doctor if you do unexpectedly lose weight.

Cancer is the cause of unintentional weight loss at least 25% of the time.<sup>1</sup> While weight loss is more likely to occur in advanced cancers, it can occur in early-stage cancers as well.

Cancer can cause weight loss in several ways:

- Changes in the metabolic activity of the body caused by cancer may increase daily calorie needs.
- Cancers such as colon cancer can cause people to become full faster when eating, reducing their overall consumption.<sup>2</sup>
- Other cancers may interfere with eating by causing nausea or difficulty swallowing.
- Sometimes people with cancer may simply not feel well enough to eat as they normally would.

The syndrome of cancer cachexia, which includes weight loss as well as muscle wasting, is not only a symptom of cancer but is considered the direct cause of death in up to 20% of people with cancer.

## Lumps and Bumps

A lump or thickening anywhere on your body that does not have an explanation is an important first symptom of cancer.

**Breast lumps** could be cancer but could also easily be benign breast cysts or fibroadenomas. There are less common signs of breast cancer as well, and symptoms such as redness, thickening, or an orange-peel appearance to the breast should be addressed.

It's important to see your doctor if you have *any* changes in your breast tissue, even if you've had a normal mammogram. Mammograms miss around 20% of breast cancers.<sup>4</sup>

**Testicular lumps** may be a symptom of testicular cancer, and just as women are encouraged to do monthly self-breast exams, men are encouraged to do monthly testicular self-exams.

**Enlarged lymph nodes** may be the first sign of cancer—especially lymphomas—and can occur in many regions of the body. In fact, enlarged lymph nodes are one of the key warning signs of lymphoma.<sup>5</sup>

Enlarged lymph nodes may be a sign of many solid tumors as well.<sup>6</sup> Lymph nodes function as “dumpsters” in some ways. The first cancer cells to escape a tumor tend to be caught in the lymph nodes closest to a tumor, and many cancers spread to nearby lymph nodes before spreading further in the body.

Other bumps, thickenings, or even bruises out of proportion to an injury should be evaluated by your doctor.

## Night Sweats

Night sweats are a common symptom of cancer, especially leukemias and lymphomas.<sup>7</sup> Night sweats that occur with cancer are not simply "hot flashes." They are often drenching to the point that people need to get out of bed and change their pajamas, sometimes repeatedly. Unlike hot flashes, which may occur at any time of the day or night, night sweats are more common when sleeping.

Night sweats in men should *always* be evaluated by a doctor. While this can be an important symptom of cancer in women as well, it can be hard to differentiate what is "normal" or not in women, especially those who are in the early stages of menopause.

## Abnormal Vaginal Bleeding

Abnormal vaginal bleeding can be a sign of cancer but certainly has many benign causes as well. Abnormal bleeding can take many forms, including:

- Bleeding between periods
- Periods that are heavier or lighter than usual
- Bleeding after sex
- Bleeding after you have completed menopause

Cancers of the uterus, cervix, and vagina may cause bleeding directly related to a tumor.<sup>8</sup> Hormonal changes due to cancers, such as ovarian cancer, may also cause changes in your menstrual cycle.

Every woman is different, and the most important symptoms are those that represent a *change* in what is normal for you.

### **Changes in Bowel Habits**

If you experience changes in your bowel movements, whether in color, consistency, or frequency, talk to your doctor. Symptoms of colon cancer can range from diarrhea to constipation, but what is most concerning is something that is out of the norm for you.

### **Rectal Bleeding**

If you see blood in your stool you will likely be worried, but as with other possible cancer symptoms, there are many benign causes as well.

The color of the blood is sometimes useful in determining the origin of the blood (but not the cause). Bleeding from the lower colon (left colon) and rectum is often bright red. That from the upper colon (right colon) and small intestine is often dark red, brown, or black. And blood from higher up, for example, the esophagus or stomach, is very dark and often resembles coffee grounds.

Other causes of rectal bleeding include hemorrhoids, anal fissures, and colitis, but an important point to note is that—even if you have these other conditions—it does not mean that you don't also have colon cancer. In fact, some types of colitis are a risk factor for colon cancer.<sup>9</sup>

If you have this symptom, make sure to see your doctor even if you think there is a reasonable cause.

### **Persistent Cough**

A persistent cough may be a symptom of lung cancer; roughly half of people with the disease have a chronic cough at the time of diagnosis.<sup>10</sup> It could also be a sign of a cancer that has spread to the lungs, such as breast cancer, colon cancer, kidney cancer, or prostate cancer.

A cough can be caused by a narrowing of the airways caused by a tumor, or as the result of infections that arise as a result of tumors in the lungs. Of course, respiratory conditions such as chronic obstructive pulmonary disease (COPD) must also be considered.

## **Shortness of Breath**

Shortness of breath is one of the leading early symptoms of lung cancer.<sup>11</sup> While you may associate lung cancer with a chronic cough, the most common symptoms of lung cancer have changed over time.

A few decades ago the most common types of the disease tended to grow near the large airways in the lungs; a location that frequently caused a cough and coughing up blood. Today, the most common form of lung cancer—lung adenocarcinoma—tends to grow in the outer regions of the lungs. These tumors can grow quite large before they are detected, and often cause shortness of breath with activity as their first symptom.

## **Chest, Abdominal, Pelvic, Back, or Head Pain**

Pain occurring anywhere in your body could be a possible symptom of cancer. If you have any unexplained pain that persists, especially pain you would describe as a deep ache, talk to your doctor.

### **Head Pain**

Headaches are the most common symptom of brain cancer or tumors that have spread (metastasized) to the brain, but certainly most headaches are not due to cancer.

The classic headache due to a brain tumor is severe, at its worst in the morning, and progresses over time.. People with a headache related to a brain tumor frequently have other symptoms, such as nausea and vomiting, weakness of one side of the body, or new-onset seizures. However, brain tumors can also cause headaches that are indistinguishable from a tension headache and may be the only sign that a tumor is present.

Cancer spread to the brain (brain metastases) are seven times more common than primary brain tumors and cause similar symptoms. Cancers most likely to spread to the brain include breast cancer, lung cancer, bladder cancer, and melanoma.<sup>13</sup> It's not uncommon for people with brain metastases, especially those with small cell lung cancer, to have symptoms related to a tumor in the brain before they have symptoms due to the primary cancer.

### **Back Pain**

The most common cause of back pain is a back strain, but back pain that persists and doesn't have an obvious cause could be a symptom of cancer as well. Back pain related to cancer is often (but not always) worse at night, does not improve when you lie down, and may worsen with a deep breath or during bowel movements.

Back pain can be caused by tumors in the chest, abdomen, or pelvis, or by metastases to the spine from other cancers.<sup>14</sup>

## **Shoulder Pain**

Pain that is felt in the shoulders or shoulder blades can easily be due to a muscle strain, but it can also be an important early symptom of cancer. Referred pain from lung cancer, breast cancer, and lymphomas, as well as metastases from other cancers, may cause aching in the shoulders or shoulder blade pain.

## **Chest Pain**

There are many causes of chest pain, with heart disease often being a prime suspect. Unexplained chest pain can be a symptom of cancer as well.<sup>11</sup> Though the lung does not have nerve endings, pain that feels like "lung pain" is present in a large number of people who are diagnosed with lung cancer.

## **Abdominal or Pelvic Pain**

As with pain in other regions of the body, abdominal pain and pelvic pain are most often associated with conditions other than cancer. One of the difficulties with pain in the abdomen and pelvis, however, is that it's often hard to determine where the pain begins.

## **Fatigue**

Unlike ordinary tiredness, cancer fatigue is often much more persistent and disabling. Some people describe this tiredness as "total body tiredness" or exhaustion. It's not something you can push through with a good night of rest or a strong cup of coffee. The hallmark of this kind of fatigue is that it significantly interferes with your life.<sup>15</sup>

There are many ways in which cancer can cause fatigue. The growth of a tumor, in general, can be taxing for your body. Other symptoms of cancer such as shortness of breath, anemia, pain, or a decreased level of oxygen in your blood (hypoxia) can cause fatigue as well.

If you find that fatigue is disrupting your normal activities, make sure to talk to your doctor.

## **Skin Changes**

There are many types of "skin changes" that could be a symptom of skin cancer. Some of these include new spots on your skin (no matter the color), a sore that does not heal, or a change in a mole or freckle.

While skin cancers such as basal cell carcinoma and squamous cell carcinoma are more common, melanoma is responsible for the majority of deaths from skin cancer.<sup>16</sup>

Familiarize yourself with the ABCDEs of melanoma, which cover aspects of skin changes (asymmetry, borders, diameter, and more) that may indicate skin cancer. Though a less-than-clinical distinction, many experts note that even something you consider "funny looking" could be a sign of skin cancer.

It's worth noting that melanomas are often first noticed by someone else. If your loved one has a suspicious looking skin spot, don't be afraid to say something.

### **Bloating (Abdominal Distension)**

Abdominal swelling or bloating may be a first symptom of several cancers, including ovarian cancer, pancreatic cancer, and colon cancer.

You may feel a fullness in your abdomen or may note that your clothes are tighter around the middle even though you haven't gained weight.

Ovarian cancer has been coined the "silent killer" as symptoms often occur late in the disease, and then are frequently dismissed as due to something else.

It's been found that bloating is a common symptom of ovarian cancer, but women often attribute this symptom to weight gain or other causes. Likewise, constipation, pain with intercourse, constipation, and frequent urination can be symptoms of ovarian cancer, but are often first attributed to other causes.<sup>17</sup>

If you notice any of these symptoms talk to your doctor. Ovarian cancer can be curable when caught early.

### **Blood in Urine**

Blood in your urine can be a symptom of bladder cancer. Even a slight pink tinge to your urine warrants a visit to your doctor. This is extra important if you have a history of smoking, as the habit is responsible for at least half of bladder cancer cases.<sup>18</sup>

### **Difficulty Swallowing**

Difficulty swallowing, also known as dysphagia, can be a symptom of cancer. It is often the first symptom of oesophageal cancer due to narrowing of the esophagus.<sup>19</sup>

Since the oesophagus travels through the area between the lungs (called the mediastinum), tumors in this region such as lung cancer and lymphomas often cause this symptom as well.

## **Rare Symptoms**

There are several less common, but no less important symptoms that may alert you to the presence of a cancer. Some of these include:

- **Blood clots:** There are many risk factors for blood clots in the legs known as deep vein thrombosis (DVT). In recent years, it's been noted that one of these factors can be a previously undiagnosed cancer.<sup>20</sup> It is important to know the symptoms of DVTs not just because of this, however, but because they often break off and travel to the lungs, something known as a pulmonary embolus.
- **Urinary changes:** Changes in urination such as frequency or difficulty starting your stream can be an early symptom of cancer.

- **Heartburn or indigestion:** Chronic heartburn due to gastroesophageal reflux disease (GERD) is an important cause of esophageal cancer. If you have long-standing heartburn, talk to your doctor about screening.
- **Shingles:** Shingles, a condition caused by reactivation of the chickenpox virus, can be a symptom of underlying cancer.
- **Depression:** New-onset depression is a fairly common early symptom of cancer.<sup>21</sup>
- **Fractures with minimal trauma:** When cancers spread to bones they can weaken them so that fractures occur with minimal trauma. A fracture that occurs in a bone weakened by cancer is called a pathologic fracture.
- **Easy bruising:** Cancers that infiltrate the bone marrow can reduce the number of platelets in your blood. Decreased platelets, in turn, can result in easy bruising.
- **White patches in your mouth:** White patches on the gums or tongue (called leukoplakia) could be an early symptom of oral cancers, and many doctors now routinely screen for this during regular dental exams. Whereas smoking and drinking were the prime culprits causing these cancers in the past, many are now believed to be caused by infections with the human papillomavirus (HPV).<sup>22</sup>

Finally, some cancers cause unique symptoms based on compounds they produce and secrete. These symptoms—referred to as paraneoplastic syndromes—may present with symptoms caused by the actions of those compounds.

For example, some lung cancers produce a hormone-like substance that raises the calcium level in the blood. Symptoms of hypercalcemia (high blood calcium), such as muscle aches, may, therefore, be the first symptom of cancer.<sup>23</sup>

## Sub-Groups and Complications

It's important not to dismiss symptoms due to a lack of risk factors. For example, breast cancer *does* occur in men, as well as many women without a family history of the disease. Lung cancer *does* occur in people who have never smoked. And colon cancer *does* occur in young men and women.

If you have any symptoms, don't ignore them, even if you have no risk factors or family history of cancer and have lived a healthy lifestyle.

People with existing conditions such as diabetes, cardiovascular diseases, chronic pulmonary diseases, psychiatric disorders, and dementia often have a different course of cancer detection and treatment, as well as more postoperative complications and a higher mortality. In some conditions, there is earlier detection because you are visiting the doctor frequently. In others, especially psychiatric conditions, people may delay getting a diagnosis.

Various conditions may mean that doctors are reluctant to do aggressive cancer treatment because your health is already fragile and you might not tolerate surgery, radiation, or chemotherapy. The cancer drugs might interact with the medications you are taking for your other condition. Your other condition might become worse, and this can make it difficult to complete cancer treatment.

For example, if you have lung disease, chemotherapy can result in lung inflammation and worsen your symptoms. Steroids and side effects of cancer treatment can affect blood glucose control in diabetes.<sup>24</sup> In addition, with many conditions, you will have a slower recovery if you receive cancer treatment.

Cancer treatment is also difficult during pregnancy as the fetus would be affected by chemotherapy or radiation.

## When to See a Doctor

There are very few symptoms that specifically mean cancer, so it's hard to know when you should be concerned. Any symptom that is new to you; that you have been living with, but is unexplained; and any change in bowel, bladder, or menstrual habits that is out of the ordinary for you is worth discussing with your doctor.

Oftentimes, these symptoms turn out to be related to conditions other than cancer. But confirming that is essential to avoiding missing an early diagnosis.

Despite the importance of addressing cancer symptoms, many people delay talking to their doctor. For example, a 2016 study found that the median time between noting symptoms of lung cancer and the eventual diagnosis was 12 months.<sup>25</sup> People delay going to the doctor for several reasons, including denial, fear of the diagnosis, or fear of being labeled a "complainer" or "hypochondriac."

If you note any symptoms, make sure to consciously admit the symptom to yourself and share your concern with a loved one you trust. Your doctor *wants* you to bring up any unusual symptoms, and it *can* make a difference if cancer is found early.

Finding cancer early may increase survival rates and can minimize the extent of treatment needed. Even when cancers have progressed to a point in which they are no longer curable, they can often be managed. People are living longer than ever with cancer, as the 15 million cancer survivors in the United States alone show.

**If you have any of the cancer symptoms noted above—or any symptoms *not* listed for that matter—talk to your doctor. At times it may be hard to determine the precise cause of a symptom. Be persistent. Symptoms are your body's way of telling you that something is wrong. If you aren't getting answers, ask for a referral or get a second opinion. Nobody knows your body or what is normal for you better than you do.**