

MAYO CLINIC HEALTH LETTER

Reliable Information for a Healthier Life

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Palpitations

The heart of the problem

It happens infrequently — a sort of flip-flopping sensation in your chest, as if your heart just skipped a beat. It's an odd feeling that makes you wonder if something is wrong.

Heart palpitations are the sensation of the beating of your own heart. This can occur with normal heart rhythm, such as the heart beating rapidly after strenuous exercise. Alternatively, it may occur due to an abnormal rhythm of the heart. Palpitations are extremely common and often harmless. However, that feeling of a skip, bump or flip in the heart — or heartbeats that are too hard or too fast — can be unnerving.

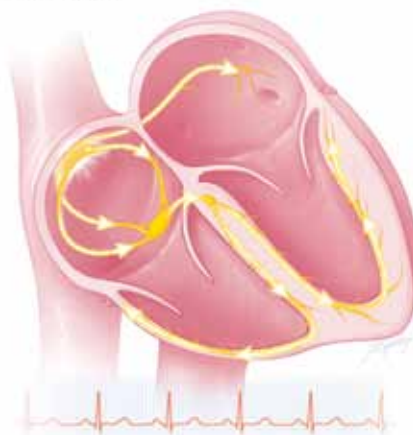
In some instances, palpitations may indicate the presence of an underlying condition, such as a heart rate or rhythm

problem (arrhythmia) that may or may not be life-threatening. Although palpitations may not occur with a more serious arrhythmia, it's important to recognize signs and symptoms that may be related to reduced blood output from your heart. These include shortness of breath or wheezing, weakness, dizziness, lightheadedness, fainting or near fainting, and chest pain or discomfort. Seek emergency care if you suddenly or frequently experience any of these.

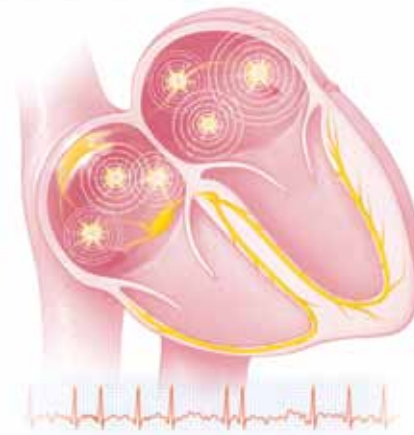
From harmless to concerning

Some people with a normal heart may experience an increased awareness of their heart beating. However, most people don't notice as their heart pumps at its normal rate and rhythm. If palpitations are noticed, what's being felt is the subjective feeling of the heartbeat. Palpitations may be felt in your chest, throat or neck. They may be noticed during activity or while sitting or lying down. ♦

Normal heart



Atrial fibrillation



In a normal heartbeat, an electrical signal travels from the heart's upper chambers (atria) to the heart's lower chambers (ventricles). Atrial fibrillation occurs when electrical signals fire from multiple locations in the upper chambers, causing them to beat chaotically. The ventricles respond by beating faster.



Many things can trigger palpitations. Strong emotions — such as fear, anxiety or stress — may prompt them. Intense physical activity or strenuous exercise can make it feel as if your heart is racing or beating too hard. Certain stimulants may bring on palpitations, such as caffeine use — too much coffee, tea or other caffeinated beverages — alcohol use or smoking. Other stimulants — including certain decongestants or herbal or nutritional supplements — may contribute to the problem. Examples include cold and cough products that contain pseudoephedrine, some inhaled asthma medicines, or diet pills. Fever, dehydration or hormone changes associated with menopause also may prompt them.

Palpitations may also occur due to other health issues. Some of the more common ones include an overactive thyroid (hyperthyroidism), anemia, and disease that affects the heart's structure or function.

Damage to heart muscle from a previous heart attack, heart failure and heart valve problems can result in abnormalities along the heart's electrical pathway that produce arrhythmias. These abnormalities in heart rate or rhythm can range from being harmless to sometimes being life-threatening.

Sorting it out

An episode of palpitations may not occur during your doctor appointment.

Instead, potential causes may emerge from a thorough health history, physical exam and description you provide of your palpitations as well as any other symptoms that may occur along with them. Your doctor may ask you to tap out with your finger what the palpitations feel like.

Initial tests often include blood work to screen for underlying conditions and an electrocardiogram (ECG), which measures the electrical activity of your heart. The ECG may not capture a palpitation episode, but it may be of value in identifying an underlying tendency to have arrhythmias that you can't feel or other heart problems.

To record your heart's activity, you may be asked to wear a portable ECG device — called a Holter monitor — for a day or more as you go about your regular activities. If your palpitations

Preventing arrhythmias

Many arrhythmias are connected to underlying heart disease. When that's the case, there are some steps you can take that can aid in ongoing treatment and management of your arrhythmia. These include:

- *Getting your doctor's OK before exercising* — Exercise is an important component in heart health, but if you have an arrhythmia, check with your doctor before starting regular exercise. If you have atrial fibrillation, your heart rate may speed up quickly as soon as you exert yourself, so it's important to make sure your heart doesn't race too fast from exercise.
- *Asking your doctor about blood-thinning medications* — The risk of developing blood clots that can cause a stroke can be especially concerning if you have atrial fibrillation. Discuss your blood-clotting risks with your doctor and whether you need blood-thinning medication.
- *Cutting back on caffeine and alcohol* — Caffeine can cause your heart to beat faster, possibly contributing to development of more-serious arrhythmias. Too much alcohol can affect your heart's electrical impulses or increase the likelihood of developing short-term and ongoing (chronic) arrhythmias. In the case of chronic alcohol abuse, the heart may beat less effectively, which weakens the heart muscle (alcoholic cardiomyopathy).
- *Stopping use of tobacco products* — Nicotine in cigarettes and chewing tobacco can speed up your heart rate, making arrhythmia worse. Chemicals in tobacco also damage your arteries. If you're concerned about your ability to stop tobacco on your own, ask your doctor for help.
- *Reducing stress in your life* — Stressful situations result in a surge of hormones that temporarily increase blood pressure due to your heart beating faster and blood vessels narrowing. This can place added stress on your heart if you have an arrhythmia. Take a few moments each day to relax, and learn to recognize what your stressors are so that you can better deal with them or avoid them.
- *Checking with your doctor before taking nonprescription drugs or supplements* — Be in-the-know and avoid products that can worsen your arrhythmia or interact with other medications you're taking.

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are more sporadic, an event recorder can be used over several weeks and can be self-activated when you feel symptoms. Other tests, such as a chest X-ray or echocardiogram, may be done to view the structure and function of your heart chambers and valves.

Treatments vary

Often, palpitations are harmless, such as may occur with a structurally healthy heart that produces occasional premature beats. Other than reassurance, no treatment is necessary. However, should palpitations become more frequent, noticeable or bothersome, check back with your doctor. If palpita-

tions stem from an underlying condition — such as hyperthyroidism — treating that condition generally takes care of the associated palpitations.

Sometimes, fast heartbeats that originate above the lower half of your heart can be stopped using vagal maneuvers. These maneuvers — such as holding your breath and straining, dunking your face in ice water, or coughing — affect the vagus nerve, which helps control heart rate. Many types of arrhythmias that cause the heart to race respond well to anti-arrhythmic medications. Some heart arrhythmias require a surgical or catheter-based procedure to correct the problem. □

There's a wide spectrum of arrhythmias

Arrhythmias are classified by where they originate in the heart and by the speed of heart rate they cause. A fast heartbeat — meaning a resting heart rate greater than 100 beats a minute — is called tachycardia. A slow heartbeat — a resting heart rate of less than 60 beats a minute — is called bradycardia. Rarely do slower heart rates cause the sensation of palpitations.

Palpitations can be associated with many types of arrhythmias, ranging from harmless to potentially life-threatening. Among them are:

- **Premature beats** — These are the most common type of arrhythmias and may produce the sensation of a skipped beat or fluttering in the chest. Sometimes the premature beats take place in the heart's upper chambers. These are called premature atrial contractions (PACs). If they occur in the lower chambers — the ventricles — they're known as premature ventricular contractions (PVCs). PACs and PVCs usually are harmless and happen naturally. They're the most common cause of palpitations. Many people never notice them.
- **Supraventricular tachycardia (SVT)** — SVT includes many forms of arrhythmia that originate above the ventricles (supraventricular). SVTs usually cause a burst of rapid, regular heartbeats that begins and ends suddenly and can last from seconds to hours. In an otherwise normal heart, SVT is generally not life-threatening, though the rapid beating can be quite uncomfortable.
- **Atrial fibrillation or atrial flutter** — Often a problem in older adults, atrial fibrillation produces fast and chaotic beats in the heart's upper chambers. As a result, the atria can't pump blood down to the ventricles as they should. Over time, this problem may lead to increased risk of stroke or heart failure. Atrial flutter is less common, producing a very fast and regular heartbeat.
- **Ventricular tachycardia (VT)** — This very fast, regular beating of the heart's lower chambers may last for a few seconds or much longer. An episode lasting less than 30 seconds may not cause problems, but beyond that the heart may be pushed into sustained VT and possibly ventricular fibrillation. Rapid and chaotic quivering of the ventricles with ventricular fibrillation can be deadly within a few minutes, as the ventricles are unable to pump blood away from the heart.

Health tips

Help for someone grieving a death

No matter how well you know someone, when grief overtakes that person due to a painful loss, you may not know what to say or do. Mental Health America offers these suggestions:

- **Be present and listen** — Listening is one of the most important things you can do. Observe how your grieving loved one communicates through words and body language. Part of active listening is acknowledging the essence of what's been said and then asking questions, if necessary, to clarify what's behind a grieving person's statements. Sometimes "listening" is done in silence. Just sitting and being with a grieving person may be comfort enough.
- **Speak from the heart** — Doing so may help your loved one feel less alone in the loss. Don't presume to know what a grieving person is experiencing. Instead, describe your own feelings and notice how the person responds.
- **Offer practical help** — Rather than making a general offer — such as "Let me know if there's anything I can do" — be more specific. Ask what's needed, or observe the situation and make a specific offer to help with practical needs, such as grocery shopping, yardwork or errands.
- **If necessary, encourage getting help** — An inability to interact with others or resume activities is an indicator that more support is needed. You might suggest seeing a primary care doctor or possibly a therapist or psychiatrist. A person's faith community may be another resource. □

News and our views

Oral hygiene and reduced throat cancer risk

When it comes to cancer of the back of the throat, one risk factor — human papillomavirus (HPV) infections — appears to be increasing in incidence, and it's often considered to be the cause of these cancers. Recent findings, published in *Cancer Prevention Research*, suggest that one way to combat this rise is to maintain good oral health.

HPV is the most common sexually transmitted infection in the U.S. and is commonly associated with the vast majority of cervical cancer cases. Importantly, HPV can also be transmitted to the upper digestive tract, including the back of the throat. It's estimated that 3.7 percent of Americans have an oral infection of one or more of the high-risk HPV virus types associated with head and neck cancer. Fortunately, the body can usually fend off the virus, preventing cancer from developing.

It's not entirely understood how HPV is transmitted, but oral sex is a strong risk factor, as is having multiple lifetime sexual partners. It's not known if the virus can be spread by other means such as by open-mouthed kissing. Smoking tobacco is also associated with an increased risk.

To compile their findings, researchers combed through a large health database to determine if oral health and hygiene also play a role in oral HPV transmission and infection. The people who rated their oral health as poor to fair were about 55 percent more likely to have an oral HPV infection when compared with people who rated their oral health as good to excellent.

The study authors and Mayo Clinic doctors both emphasize that conclusions of this study suggest a statistical association, not necessarily cause and effect. Nevertheless, maintaining good oral health, keeping alcohol intake within moderation and not smoking are good practices in general. □

Europeans give dark chocolate healthy status

The European Commission has given permission to a Swiss company to claim specific cardiovascular health benefits on products made with its specially processed dark chocolate. The claim stems from scientific evidence that the cocoa — produced by the Zurich-based company Barry Callebaut — contains levels of antioxidants that are high enough to help maintain elasticity of blood vessels and normal blood flow.

Barry Callebaut also supplies its specially processed cocoa as an ingredient to several large U.S. retail chocolate manufacturers. However, it's not yet known how U.S. manufacturers will use this ingredient in their products.

Raw cacao beans are a naturally rich source of flavonoids. Although processing reduces flavonol concentration, the best chocolate options for flavonol content are dark chocolate — in particular, products that don't list sugar as their first ingredient — and unsweetened 100 percent cocoa powder that hasn't been Dutch processed. Barry Callebaut's processing technique maintains up to 80 percent of cocoa flavonols.

Mayo Clinic doctors say research has linked dark chocolate with a number of cardiovascular benefits, including improved blood vessel function, cholesterol levels and, in some cases, reduced blood pressure. However, if you indulge in a square of dark chocolate on a daily basis, cut back on calories elsewhere in your diet to avoid offsetting the potential benefits. □

Obesity surgery

New approaches

One of the most effective forms of intervention for severe obesity is surgery to alter the digestive system (bariatric surgery). The most common procedure is the Roux-en-Y gastric bypass.

Today, this is commonly performed with narrow tools through small incisions (laparoscopically). Still, it's a major surgical procedure requiring general anesthesia. It drastically reduces the size of the stomach and allows food to bypass a segment of the small intestine, thus altering how food is digested. It often leads to the loss of 30 to 35 percent of preoperative weight one year after the operation. And it often leads to remarkable improvements in cholesterol levels and blood pressure — and major improvement or even resolution of type 2 diabetes and sleep apnea.

However, bariatric surgical interventions are costly, are often irreversible, and carry short- and long-term complication risks — including a slight but real risk of death. They should only be considered after attempts at lifestyle changes have been exhausted, and they don't replace the need for exercise and healthy food choices.

Doctors and researchers continue to refine existing bariatric procedures and are developing new approaches to bariatric surgery to reduce the hardship, cost and risk, while maintaining many of the benefits of bariatric surgery.

Other surgical procedures

There are several surgical alternatives to Roux-en-Y gastric bypass that are generally considered to be less aggressive but are still major surgery. They're typically performed laparoscopically and include:

- *Sleeve gastrectomy* — Although this is a new operation, it has become the second most common bariatric surgery

performed. During the procedure, your stomach is reduced from a large pouch to a tube. This restricts the amount of food that you can eat at one time and reduces production of a hormone that promotes hunger (ghrelin). Two years after the surgery, the typical weight loss is 20 to 25 percent of the person's pre-operative weight.

■ **Laparoscopic adjustable gastric banding (LAGB)** — In this procedure, an inflatable band is placed around the uppermost part of the stomach and stitched in place. When the band is inflated, it pinches the stomach and creates a very small upper pouch that connects to the rest of the stomach through a small opening. The small upper pouch limits the amount of food you can eat. Using a port that's under the skin, fluid can be injected or removed to adjust the band. Since LAGB doesn't involve cutting internal organs, it's associated with lower risk of death. But it has been associated with significant complications. In addition, the weight loss results generally aren't as good as other options, with an expected 50 to 60 percent loss of excess weight after two years.

■ **Mini-gastric bypass** — This is similar to the Roux-en-Y procedure, but it simplifies the rearrangement of the small intestine, making for a less complex procedure. Since this is a newer procedure, long-term results aren't known, but research to date shows that about 95 percent of those who have the procedure lose about half of their excess weight by 1 1/2 years.

Incision-free procedures

Emerging forms of bariatric procedures offer the ability to make changes to your stomach or small intestine using tools that are inserted through your throat (endoscopically) while you are sedated. This eliminates the need for incisions in the abdomen and results in limited cutting and manipulation of the stomach and intestines.

Most endoscopic procedures are performed on an outpatient basis. They tend to be associated with faster recov-

ery when compared with surgery. These procedures aren't routinely performed and most remain under investigation. However, it appears that this may change as knowledge of techniques spread and data regarding results and risks become available. Research results are aimed at guiding Food and Drug Administration (FDA) approval for the required devices.

Generally, they're not expected to produce weight-loss results that match those of surgical procedures. Ongoing investigation is aimed at identifying who might benefit most from these procedures, whether it be those with moderate obesity, children and adolescents, or at-risk superobese individuals who might need a minimally invasive endoscopic alternative as a bridge to traditional bariatric surgery.

Endoscopic procedures include:

■ **Endoscopic sleeve gastropasty** — This is similar to sleeve gastrectomy in that the stomach is made into a small tube. However, instead of cutting away part of the stomach during abdominal surgery, endoscopic tools are used to suture the stomach into a tube shape from inside the stomach, reducing the stomach capacity by about 80 percent. Preliminary findings show an average excess weight loss of 36 percent at six months. However, there's some concern that the sutures may not always hold together and may require repeat suturing to maintain weight loss. It's also not clear if this procedure reduces the production of appetite-stimulating hormones as does the surgical version.

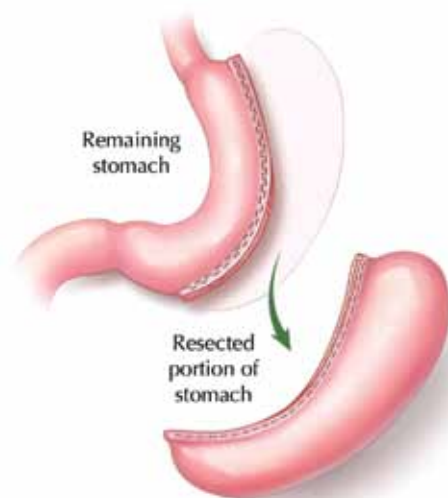
■ **Aspiration therapy** — Using endoscopic tools and a single puncture through the abdomen into the stomach, this procedure involves creating a tube from the stomach to a port on the outside of your abdomen. About 20 minutes after meals, you hook up a suction device to the port and siphon about a third of your partially digested meal from your stomach and deposit it in the toilet. In a small pilot study, people using the device lost about 50 percent of their excess weight after one year of

use. The device appeared to be quite safe, and there was no compensative eating to make up for the removed calories. In fact, operating the device tended to cause study participants to make dietary choices that further facilitated weight loss.

■ **Small intestine bypass sleeve** — This is a flexible Teflon linear tube that's about 2 feet long. One end is secured to the area where the small intestine exits the stomach, and the length of the tube is deployed along the small intestine endoscopically. Partially digested food passes through the tube without mixing with digestive pancreas and liver secretions until later in the small intestine. Preliminary research suggests about 30 percent of excess weight may be lost three to nine months after having the sleeve implanted. However, the tolerability and durability of the sleeve are still being studied.

One thing doesn't change

Bariatric procedures of any kind aren't an effortless cure-all for obesity. They're a supportive mechanism for making a serious change in lifestyle that includes eating less, eating healthfully, getting regular exercise and managing other aspects of your overall health. If you're not committed to making a change, bariatric procedures aren't likely to be the right thing for you. □



In sleeve gastrectomy, your stomach is reduced from a large pouch to a tube.

Chronic cough

When nothing works

Finding the cause of chronic cough can be frustrating and time consuming. Still, a systematic approach to finding and treating an underlying cause frequently yields results. And if a cause can't be found, there are other treatments that may provide relief.

Since most cases of chronic cough have an underlying cause — most commonly asthma, gastroesophageal reflux disease (GERD), or postnasal drip — the first task is attempted diagnosis. If you've already been through an unsuccessful but fragmented diagnostic process, you and your doctor may need to critically analyze the effort so far. In addition, a referral to a cough specialist may be warranted.

Redoubling the effort

It may be frustrating to find yourself back at diagnosis, but there are many inadvertent missteps that are easy to make. Approaching diagnosis with a renewed sense of thoroughness often reveals new insights, including:

- **Drug causes** — Angiotensin-converting enzyme (ACE) inhibitors taken for blood pressure control can cause chronic cough. A switch to a different drug is almost always recommended. Even if you've taken an ACE inhibitor for years and it hasn't caused a cough, it still may be contributing to your current cough. It may take up to a month for your cough to go away after discontinuation of an ACE inhibitor.
- **Smoking or environmental causes** — In addition to not smoking, it may be worthwhile to review your activities for exposure to dust, fumes or chemicals that may be irritating your airway.
- **Underlying causes** — Gastroesophageal reflux disease (GERD), postnasal drip and asthma can occur with no symptoms other than cough. Diagnostic steps can often pinpoint a problem. However, treating a possible problem

to see if the cough goes away is sometimes best. Failure to treat unnoticed postnasal drip is one of the most common oversights in cough management.

- **Inadequate treatment of an underlying cause** — Antihistamine and decongestant therapy often improves cough caused by postnasal drip. However, newer antihistamines such as loratadine (Claritin, Alavert) don't work for this purpose. Older antihistamines such as diphenhydramine (Benadryl, others) or chlorpheniramine (Chlor-Trimeton, others) are necessary. Side effects of older antihistamines often aren't well tolerated by older adults, so they require a regimen of a nasal antihistamine and nasal and inhaled corticosteroids.

In another example, taking a stomach acid suppressant for GERD can help improve coughing. But it often must be taken twice daily before meals and is likely to work best when coupled with dietary and lifestyle measures to reduce reflux. Even then, more than one acid suppressant — or even other drugs for GERD — may be necessary to adequately treat cough-causing reflux.

- **Inadequate duration of therapy** — It may take months of treatment of an underlying cause before improvement is evident. The lack of quick results may cause some to prematurely stop therapy.

- **More than one underlying cause** — Many diseases, such as asthma and sinusitis, occur together, requiring treatment of more than one cause. Even partial improvement from a treatment means it's probably worth maintaining that treatment as others are added.

- **Twists on usual underlying causes** — Variations on the usual underlying causes can mask their role in causing cough. Postnasal drip can sometimes be caused by chronic sinus inflammation, which may cause few symptoms typical of the disease and may not respond to typical postnasal drip treatment. Even if you're taking acid suppressants, reflux that doesn't contain acid can still cause coughing. A condition called eosinophilic bronchitis, or cough variant asthma, causes cough-

ing, but lung function remains otherwise normal, making it undetectable with typical asthma tests.

Targeting the cough

Sometimes, options in the diagnosis or treatment of common underlying causes are exhausted even as chronic coughing persists. This may prompt a diagnostic search for uncommon causes such as various lung diseases or tumors.

Another tack is trying to break the cough cycle, which is when coughing leads to throat irritation, that in turn leads to more coughing and so on.

This tack may include:

- **Speech therapy and behavioral techniques** — Learning techniques to reduce the urge to cough, working on relaxing throat muscles and learning to suppress coughs or to distract yourself from the urge to cough.

- **Drug therapy** — Numerous drugs may help break the cough cycle, including the local anesthetic lidocaine inhaled with a nebulizer, or drugs that blunt overactive nerve sensations such as gabapentin (Neurontin) or the antidepressant amitriptyline. Nonprescription drugs for cough such as dextromethorphan (Delsym, others) aren't effective for chronic cough.

- **Botox injection of the vocal cords** — This is an emerging therapy that involves an injection of botulinum toxin type A (Botox) to temporarily paralyze muscles of the vocal cords, usually for several weeks. □



Failure to treat unnoticed postnasal drip is one of the most common oversights in cough management.

Nausea after surgery

Prevention, management

Your hip replacement surgery is scheduled for next week. You know about pain after surgery. But you're more concerned about nausea after the procedure.

You're not alone in that sentiment. People often dread postoperative nausea and vomiting more than pain after surgery. To address the problem, anesthesia procedures — what's done before, during and after surgery — are refined and tailored to each person's potential risk of postoperative nausea and vomiting. In addition, complementary and integrative approaches to nausea relief, such as aromatherapy, also are being used with success.

What are the chances?

Nausea and vomiting after surgery affect more than 30 percent of people. Postoperative nausea and vomiting also can lead to complications. These may include inhalation of stomach contents (aspiration), dehydration, imbalance of vital minerals (electrolytes) in blood and body fluids, and injury to the surgical site — such as torn stitches (sutures).

Certain factors may increase your risk of feeling sick when you awaken from surgery. These include being female, having a history of nausea and vomiting after surgery, having a history of motion sickness and being a non-smoker. For reasons that are unclear, older adults tend to have less difficulty with postoperative nausea and vomiting.

Nausea and vomiting more typically occur after general anesthesia, which is used for surgical procedures that require you to be unconscious. The likelihood of postoperative illness increases with longer procedures and time spent under general anesthesia. Some types of surgical procedures also may increase the chance of feeling sick postoperatively. These include some laparoscopic pro-

cedures, plastic surgery, eye muscle repair for crossed eyes (strabismus), surgery involving the ear and some forms of neurosurgery on the brain.

The risk of postoperative nausea and vomiting is generally lower after surgical procedures that use local anesthesia to numb a small area, or a regional nerve block, which blocks sensation to an area of your body. These techniques also reduce the need for morphine-like drugs for pain relief. These drugs are associated with nausea and vomiting.

To sleep, with a plan

Prior to having general anesthesia, your personal risk factors are taken into account along with the type of surgery being done. Several different anti-nausea (anti-emetic) drugs may be used on their own or in combination to help avoid postoperative nausea and vomiting.

Generally, one or both of these drugs are given intravenously at the very beginning of general anesthesia:

- *Dexamethasone* — This corticosteroid has anti-inflammatory properties. It's thought to work as an anti-emetic by reducing inflammation that occurs due to surgery.

- *Droperidol (Inapsine)* — Droperidol interferes with a blood substance called dopamine by disrupting messages that could signal the onset of nausea and vomiting.

If your risk of nausea and vomiting is high, another anti-emetic — such as ondansetron (Zofran) — may be given just prior to the end of anesthesia. Ondansetron is a serotonin antagonist, which means it blocks serotonin from relaying impulses that would otherwise initiate vomiting.

Some find the preoperative application of a scopolamine skin patch (Transderm Scop) — which is used for motion sickness — to be helpful.

Along with standard drugs used to help avoid postoperative nausea and vomiting, nondrug therapies also may be incorporated to improve how you feel after surgery. Even with the best plans, efforts to prevent postoperative

nausea and vomiting may not work as hoped in every individual. If that's the case, medication given in the postoperative recovery unit may include the serotonin antagonist granisetron. □

Drug-free options

While drugs play an important role in preventing postoperative nausea and vomiting, other approaches also may help. One method involves stimulating an acupressure point on the wrist.

Called P6, it's located three finger-widths up from the inside of the wrist joint. Specially designed P6 wrist strips can be applied like a bandage to both wrists before or after surgery. Studies show that P6 acupoint stimulation helps reduce the risk of nausea and vomiting after surgery with minimal side effects. Acupuncture of the P6 acupoint also can help manage nausea and vomiting.

Aromatherapy also is helping to relieve postsurgical nausea. A recent study found that essential oil of ginger or a blend of essential oils — ginger, spearmint, peppermint and cardamom — significantly reduced nausea after surgery. The study found a significant reduction in anti-nausea drug requests after aromatherapy use.

The nonprescription product QueaseEase is an easy-to-use aromatherapy option that's formulated to calm nausea associated with surgery and anesthesia. Other individual essential oils such as spearmint or ginger also may be helpful.

Mind-body therapies also may be of help in preparing for and recovering from surgery. Some of these therapies include the use of guided imagery through meditation and deep breathing.

Second opinion

Q I usually avoid drinking water on airline flights because it's a hassle to go to the bathroom. My husband says I need to drink water to avoid getting dehydrated. Any advice?

A It's true that it's easy to become dehydrated while flying. Air in the cabin of an aircraft is very dry, and you may not want to drink water due to bathroom access worries. The stresses of navigating the airport may cause you to forget to drink some water or may leave you without easy access to water.

Moreover, it's not uncommon for travelers to have an alcoholic beverage before or during travel, which further contributes to dehydration. If you take a diuretic medication for lowering blood pressure, it can also contribute.

Dehydration that typically occurs on a flight is more of an annoyance than anything. It may lead to dry skin or dryness of your eyes or mouth. It may cause headaches or fatigue, and may cause you to feel lightheaded when sitting up or standing up quickly. Being dehydrated can also thicken nasal and sinus secretions, which may cause you to become stuffed up more than you ordinarily might if you have the sniffles.

More worrying, dehydration can be a contributing factor in the development of blood clots in the legs (deep vein thrombosis, or DVT) and may contribute to flares of gout.

Two steps to avoiding dehydration include avoiding alcohol and having a water bottle handy. Although beverage containers with liquid aren't allowed through airport security, you can carry an empty water bottle through security

and fill the empty bottle at a drinking fountain. Or you can buy a bottle of water once inside the airport. Bottled water may also be available on the aircraft itself.

If you have to get up to go to the bathroom during a flight, it's probably a good thing. In addition to wearing compression stockings, getting up and using your leg muscles is an important preventive strategy for DVT. □

Q Why does vision in dim lighting or nighttime situations get worse as you get older?

A Changes that occur with aging can impact how well you see in dimly lit or darkened settings. There also are eye conditions that are more common with age — such as cataracts, glaucoma and age-related macular degeneration — that may contribute to the problem. If you notice reduced night vision, it's worth mentioning to your eye specialist.

With aging, the lens of the eye loses elasticity. The eye's ability to adjust the shape of the lens also changes. The result is difficulty focusing on near objects, which also contributes to impaired depth perception.

The normally clear lens of the eye also becomes less transparent with age. As this happens, light becomes more scattered and therefore less precisely focused when it reaches the retina. The lens also becomes discolored, appearing yellowish in the early stages of cataract formation. Light passing through an early cataract scatters so that some of the light rays become focused in front of the retina, making the eye func-

tionally nearsighted. These changes can cause blurred vision, glare and halos around car headlights.

With cataracts that have advanced, the lens may become dark brown in color, further impairing light passage. The added discoloration and clouding reduces how much light reaches the retina and affects how well you see in dim light or darkened settings. Surgery to remove cataracts can improve vision and resolve these symptoms.

Aging also affects the size of the pupil, which acts as window for light entering the eye. Normally, pupil diameter expands in darker settings to gather as much light as possible and ratchets down to a smaller opening in bright light. As the eye ages, pupil diameter becomes smaller, so less light enters the eye. In low-light situations the change is greatest, reducing light entry so much as to potentially impair the eye's ability to adapt to dark. □

Have a question or comment?

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