Ischemic colitis occurs when blood flow to part of your large intestine (colon) has been suddenly reduced or blocked. This can lead to areas of colon inflammation and, uncommonly, permanent colon damage. Fortunately, with proper medical care, the vast majority of those who have it recover within a day or two.

Blood flow, interrupted

Your colon is nourished by constant blood flow through a network of arteries. The two main arteries that feed this network are the superior mesenteric artery, which nourishes the middle and right side of your colon and the small intestine, and the inferior mesenteric artery, which nourishes the left side of the colon.
Arteries branching from these sources form extensive connections between each other. That way, if an artery is narrowed or even totally blocked, blood can almost always be rerouted around the blockage to reach the colon. Still, blood flow to the colon can be diminished or temporarily blocked. When the bowel doesn’t get enough blood, its tissues can be damaged, causing it to leak blood. This can occur by a number of mechanisms, including:

- **Narrowing and hardening of arteries (atherosclerosis)** — Although atherosclerosis develops slowly and usually allows for the development of extensive connections, it can still diminish the overall capacity of your colon arteries and may contribute to an episode of ischemic colitis.

- **Artery tightening (vasoconstriction)** — Colon arteries are part of a sensitive survival reflex in which less essential arteries are constricted during times of low blood pressure or low blood flow so that more blood goes to the brain. This may bring on ischemic colitis.

Factors that may lead to low blood flow or blood pressure — and thus vasoconstriction — include congestive heart failure, dehydration or internal hemorrhage. In rare cases, certain medications may trigger vasoconstriction. These include pseudoephedrine, migraine medications in the triptan or ergot class, the heart drug digoxin (Lanoxin), estrogen-containing drugs, and certain antipsychotic drugs.

- **Blood clots** — These can form within a colon artery or break off from a clot in another area of the body and travel toward the colon. Blood clots are more likely to cause problems on the right side of the colon. When ischemic colitis occurs in an adult younger than 60, doctors often check for cardiac conditions such as atrial fibrillation or mitral valve disease, which can make you more susceptible to blood clot formation and clotting.

- **Abdominal surgery** — Surgery in the abdominal area, such as repair of an aortic aneurysm, may require clamping off one or more arteries that supply blood to the colon. This can be a contributing factor to an episode of ischemic colitis after an operation.

A number of other factors may be associated with ischemic colitis, such as diabetes, abdominal radiation exposure, blood vessel inflammation (vasculitis), infections and long-distance running. But in most cases of ischemic colitis, normal blood flow has already returned to the colon by the time symptoms appear. By the time a doctor starts looking for a cause, it’s common that there’s no cause left to be found.

**Diagnosing the problem**

Diagnosing ischemic colitis is as much about ruling out other causes as it is about finding evidence of ischemic colitis. Tests that help confirm a diagnosis may include:

- **Computerized tomography (CT) scan** — This X-ray test provides detailed cross-sectional images of your colon and can help diagnose certain problems such as inflammatory bowel disease.

- **Stool sample** — This is used to culture bacteria that may be causing an infection that can mimic ischemic colitis.

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**Right side, more serious**

When you have signs and symptoms that suggest an attack of ischemic colitis — except that the pain is on the right side of your abdomen — the course of the disease tends to be more problematic.

That’s because the arteries that feed the right side of the colon also feed part of the small intestine. Therefore, when blood flow to the right side of the colon is blocked, there’s a good chance that part of the small intestine also isn’t receiving adequate blood supply. Additional signs and symptoms of problems in the small intestine involve pain in the upper abdomen that comes on after eating and is severe enough to cause you to avoid food and as a result lose weight.

Unfortunately, if blood flow to the small intestine can’t be restored within 24 hours, damage is likely to be serious — putting you at risk of life-threatening leakage of bacteria into the blood — and may require removal of part of the small intestine.
**Ruling out other causes**

Signs and symptoms of ischemic colitis include abdominal pain, diarrhea, bright red or maroon-colored blood in the stool, low-grade fever, and nausea and vomiting. They tend to come on fairly suddenly in people who were previously healthy. Conditions that can mimic ischemic colitis include:

<table>
<thead>
<tr>
<th>Disease</th>
<th>Differing signs and symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infections such as <em>Escherichia coli</em> O157:H7, campylobacter, shigella, <em>Clostridium difficile</em>, others</td>
<td>Many times, symptoms may be nearly identical to those of ischemic colitis. Some can cause other problems, including kidney failure.</td>
</tr>
<tr>
<td>Colon cancer</td>
<td>Symptoms tend to come on more gradually than with ischemic colitis.</td>
</tr>
<tr>
<td>Diverticulitis</td>
<td>Pain is similar to ischemic colitis, but not accompanied by diarrhea or blood. Diverticula can bleed, but it's not painful.</td>
</tr>
<tr>
<td>Inflammatory bowel diseases such as Crohn's disease and ulcerative colitis</td>
<td>Beginning symptoms may be similar to ischemic colitis, but they won't improve as quickly.</td>
</tr>
</tbody>
</table>

**Treatment**

In most cases, there’s no reason to directly treat ischemic colitis, because if it resolves on its own within one to two days. Still, people with ischemic colitis can feel quite sick, and it’s common to spend a day or two in the hospital receiving supportive care that may include:

- **Antibiotics** — Areas of inflamed colon make it easier for bacteria to penetrate the colon wall and get into the blood. Antibiotics can help stop bacteria from spreading.
- **Fluids** — If you’re dehydrated, intravenous fluids can help restore blood flow and blood pressure.
- **Correction of underlying problems** — This may involve medications to raise blood pressure, optimizing your heart function if you have heart failure, or stopping the use of drugs that may be causing vasoconstriction.

After recovery from an initial episode of ischemic colitis, any resulting colon damage typically heals completely within two weeks. However, in a small percentage of people, healing may take longer and symptoms may linger. Rarely, the colon doesn’t heal properly and surgical removal of the damaged colon segment may be required.

**Preventing another attack**

Ischemic colitis isn’t a particularly common problem, and the cause is often unknown. The majority of those who have it recover quickly and never have another episode. For these reasons, there’s really no proven way to prevent it. Still, it makes sense to avoid a drug that may have caused ischemic colitis in the past.

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**Health tips**

**Top-notch fruits and vegetables**

Looking to get the most out of fruits and vegetables in your diet? Here are some that you don’t want to miss:

- **Potassium leaders** — If you need to increase your potassium intake, good fruit sources are bananas, kiwi, cantaloupe, apricots, pomegranate and tomatoes, including tomato products. Good vegetable sources include dried beans that have been cooked, potatoes with their peel and cooked spinach.

- **Fiber leaders** — Fruits such as berries, apples, bananas, oranges, pears and prunes can help keep things moving through your digestive tract. Peas, potatoes with their peel, dried beans that have been cooked, lentils, cooked spinach and winter squash also boost fiber intake.

- **Antioxidant leaders** — Some of your best bets are berries, particularly blueberries, cranberries, blackberries, raspberries and strawberries. Many apple varieties with their peels — choose organic if you’re concerned about pesticides — as well as cherries and black plums are good sources. On the vegetable front, choose artichokes, spinach, red cabbage, red and white potatoes with their peels, sweet potatoes and broccoli. Beans are also a good bet, especially small red beans, red kidney beans, pinto beans and black beans.
Pericarditis

Inflammation around the heart

It’s the strangest sensation — just breathing makes your chest hurt. The only position that seems to offer a bit of relief is bending forward. Are you having a heart attack?

After some blood work and a test to check your heart’s electrical impulses, doctors in the emergency care unit reassure you that it’s not a heart attack. Instead, it appears the lining that surrounds your heart — the pericardium — is inflamed.

The condition is pericarditis, and it typically causes distinct chest pain. It can occur without a clear cause, but it also sometimes develops after a heart attack or in association with other conditions, such as a viral infection, connective tissue disease or kidney failure. Whatever the cause, pericarditis can usually be successfully treated with anti-inflammatory medications.

Unwanted friction

The pericardium is a thin, sac-like membrane that surrounds your heart and prevents it from overfilling. The pericardial sac contains a small amount of lubricating fluid. During pericarditis, that sac becomes inflamed. The chest pain is a result of friction created by the inflamed sac rubbing against the outer layers of your heart.

Reducing the risk of antibiotic-associated diarrhea

Researchers report in the July 14, 2007, issue of the British Medical Journal that a specially cultured, probiotic dairy drink consumed during and after a course of antibiotics reduces the incidence of diarrhea associated with antibiotic therapy.

Antibiotics, while useful to treat bacterial infection, can upset the natural balance of “good” bacteria that normally reside in the intestines. More frequent bowel movements, loose stools or mild diarrhea may occur as a result. For some, that imbalance may lead to an overgrowth of the bacteria Clostridium difficile. An overgrowth of C. difficile may produce a toxin that causes severe, watery diarrhea that can be bloody, warranting immediate medical attention.

Study participants were randomly assigned to drink either a probiotic drink containing bacteria thought to be beneficial or a milkshake containing no bacteria twice daily within 40 hours of starting antibiotic therapy and for a week after antibiotics. The probiotic drink — marketed in the United States as DanActive and found in supermarkets — contained Lactobacillus casei, L. bulgaricus and Streptococcus thermophilus. Among those who drank the milkshake, 34 percent developed diarrhea, compared with 12 percent in the probiotic group. And no one in the probiotic group had diarrhea associated with C. difficile, whereas 17 percent in the milkshake group did.

Mayo Clinic doctors say that the study’s results may support the use of the probiotic drink for prevention of antibiotic-associated diarrhea and C. difficile colitis, but that more research is needed.

Alcohol and breast cancer: Understanding the risks

You’ve heard that drinking alcoholic beverages increases your risk of breast cancer, but does that include the daily glass of red wine you have with dinner to keep your heart healthy?

Unfortunately, it does. At least according to a recent study presented at the European Cancer Conference in Barcelona, Spain. The study — one of the largest of its kind — tracked the drinking habits of about 70,000 American women for more than two decades.

The study found that women who drank one or two alcoholic beverages a day increased their lifetime risk of developing breast cancer by 10 percent over women who drank less than one drink a day or nothing. Women who had three or more drinks a day increased their lifetime risk by 30 percent.

Mayo Clinic experts say that the evidence supporting alcohol use as a risk factor for breast cancer is much stronger than the evidence supporting its potential cardiovascular benefits. They also note that adequate folic acid intake appears to at least partially offset the increased breast cancer risk. For women who are concerned about breast cancer risk, avoiding alcohol may be best. But if you do drink, Mayo experts recommend limiting yourself to less than one drink a day and considering taking 400 micrograms of folic acid, in either a supplement or a daily multivitamin.

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people who’ve had a recent heart attack. Pericarditis may develop days and even weeks later in up to 15 percent of heart attack survivors. They also run the risk of a more serious form of pericarditis that may develop months after a heart attack.

What it feels like

Acute pericarditis typically produces sharp, stabbing chest pain below the breastbone or on the left side of the chest. It’s not unusual to feel as though you’re having a heart attack. The pain may spread to your left shoulder or to your neck. For some, the chest pain may be dull with achy or pressure-like aspects, and it may vary in intensity.

Complications

Although pericarditis can usually be successfully treated, some people experience complications, such as:

- **Constrictive pericarditis**
  - Chronic pericardial inflammation or frequent recurrences of pericarditis may lead to permanent thickening, scarring and stiffness of the pericardium. When this happens, it impairs the heart from expanding between contractions and filling with blood. This can lead to heart failure, swelling of the legs, abdominal swelling and even shortness of breath. Sometimes, constrictive pericarditis is managed with corticosteroid or nonsteroidal anti-inflammatory drugs for a period of two to three months. In chronic constrictive pericarditis, surgical removal of the pericardium (pericardiectomy) is usually necessary.

- **Cardiac tamponade**
  - If too much fluid collects in the pericardial sac or space, pressure is placed on the heart so that it’s prevented from filling properly. As less and less blood leaves the heart, blood pressure drops, making for a potentially fatal situation. Treatment may require draining fluid from the heart through a needle that’s carefully inserted through the chest wall.

There’s no question that chest pain warrants immediate medical care. Even if the cause turns out to be pericarditis or another nonemergency condition — such as the lung condition pleurisy — the symptoms mimic those of a heart attack or blood clot in the lungs, both of which are emergency situations.

Tests may include an electrocardiogram (ECG), to measure your heart’s electrical impulses. An ECG can show abnormalities that may indicate pericarditis as the source of trouble. Other tests, including a chest X-ray, echocardiogram and blood tests, may be done to determine the extent of pericarditis and to exclude other conditions. MRI may be helpful to demonstrate inflammation of the pericardium.

Putting things right

Mild pericarditis may clear up on its own. Acute pericarditis typically lasts from one to three weeks. In addition, about 20 percent of people with pericarditis have a recurrence within months. The rate of pericarditis recurrence is even higher if corticosteroids are used as first line treatment.

Corticosteroids were commonly used to treat pericarditis in the past. However, recent treatment modifications support not using steroid medications as the first drug of choice. Instead, treatment typically involves taking aspirin or some other nonsteroidal anti-inflammatory agent for up to a month as well as the drug colchicine for up to three months. The chance for recurrence of pericarditis may be reduced by two-thirds when colchicine is taken along with the aspirin. Colchicine is an anti-inflammatory drug typically used to treat gout.

The vast majority of people who have an episode of pericarditis recover fully without recurrence if they’re diagnosed and treated promptly with effective anti-inflammatory medications. In addition, avoiding early use of corticosteroids may help lower the risk of recurrence even more. In a small number of people with relapsing, painful pericarditis, surgical removal of the pericardium may be necessary.
Ayurvedic medicine

Balance in life and health

Ayurvedic (i-yur-VA-dik) medicine is thought to be one of the world’s oldest systems of natural medicine. It originated in India more than 5,000 years ago.

Today, ayurvedic medicine exists in India side by side with conventional Western medicine. Like Western medicine, ayurvedic medicine has different branches — among them are internal medicine, surgery and pediatrics. Its principles are being introduced to a growing audience outside of India that’s curious about alternative approaches to managing health and wellness.

Balance in everything

The word “ayurveda” means science of life. Boiled down to the basics, ayurveda takes its cues from the universe — ayurvedic medicine is all about balance in one’s life.

Balance in your life starts the moment you’re born. As a newborn, you possessed innate qualities that helped to frame your physical and mental patterns. The essence of who you are at the start of your life is called prakriti. At the other end of the spectrum is vikruti, which is who you are today. Vikruti is basically your prakriti combined with all that has affected you throughout life — this includes your friends, what you choose to eat, the type of work you do, your hobbies, and on and on.

In ayurvedic medicine, the closer you are to your prakriti, the better. Conversely, the more divergent you become from the essence of who you originally were, the greater the potential for discord in your life and health.

For example, if you’ve always thrived on warmth yet you’re living in a climate that’s cold or becomes very cold for a good part of the year, there’s discord and potential for health-related issues.

Or, perhaps you’ve always felt safe and at ease in small settings, yet your work environment is an open office arrangement where desks are closely spaced in a large, bustling room of people. According to ayurvedic principles, it’s possible that discord could be contributing to your frequent headaches.

Imbalance and energy patterns

When there’s discord in life — meaning too much divergence from your innate self — this can lead to dosha imbalance. The term “dosha” refers to your energy pattern.

To simplify, dosha imbalance is generally thought to lead to problems with metabolism, allowing for accumulation of toxins in the body. Based on your own predisposition, those toxins or wastes tend to accumulate in certain parts of the body.

For instance, if you’re a dry (vata) kind of person — your skin may tend to be dry, and you may be of a slight build — toxins may be more likely to accumulate in your joints. So if you’re stressed or you make bad food choices, your joints may become painful.

The practitioner of ayurvedic medicine considers carefully what dosha is of greatest influence in a person. Before identifying what disease may be at work, the practitioner needs to understand who the person is and if there’s great discord in the person’s life between the innate and the current self.

Practical applications

Ayurveda considers everything you encounter to have therapeutic value. Whatever you come in contact with — the foods you eat, how you dress, the way you sleep, what you see and hear — affects you in some fashion and shapes you. Here are some practical applications of ayurveda in everyday life:

- **Consider the variables in your environment** — Go past the obvious. Dry skin, for example, may require more than just lotion. Look at your emotions, and consider how to heal emotional dryness.
- **Take steps to counter discord in your life** — For example, your spouse may have an innate affinity for the cold, like to keep the air moist and eat a lot of ice cream. You, on the other hand, may have a strong need for warmth. You can bring yourself back to balance by spending time with friends who are warm, finding warmth in your relatives, drinking hot tea, exercising to create warmth and dressing warmer.
- **Consider food as medicine** — Bring your attention to the food you eat. In some ways, eating is a sacred action — the food you choose becomes part of you. So make good choices, aiming for lots of fruits, vegetables and whole grains. Be engaged with eating — turn off the TV and enjoy each bite rather than eating to finish. Chew slowly, giving your body a chance to use the food as fuel. It’s important not to go to bed with a full stomach — instead, eat your largest meal at midday.

Consider this

In general, ayurvedic medicine practices such as yoga, massage or meditation appear to be safe and may be effective. But good-quality scientific studies on ayurvedic practices are limited. Of particular concern are therapies that involve the use of herbs or metals — sufficient scientific data is lacking to recommend their use.

More may be known within a few years as researchers investigate certain ayurvedic supplements. For now, if you do use an ayurvedic supplement, do so only under a doctor’s close supervision because some have the potential to be toxic.
Priapism

A painful, prolonged erection

The injections you’ve been using to treat your erectile dysfunction work well. But your latest injection is working too well. It’s been going on for two hours, and your erection won’t go away. It’s beginning to ache and although you’re embarrassed, you decide to go to the emergency care unit for help.

You made the right decision. Priapism (PRI-uh-piz-um) is an erection that doesn’t end when sexual stimulation is over — or occurs in the absence of sexual stimulation.

Penile tissues can be damaged if the erection persists for several hours or more. But with prompt treatment, normal blood flow to the penis can often be restored, possibly averting injury.

Low flow, high flow

Priapism is a problem related to blood flow to the penis. It can take one of the following forms:

- **Ischemic or “low-flow” priapism** — This is when blood flow out of the erect penis is somehow impaired, essentially trapping the blood that caused the erection. Lack of fresh blood flow can injure penile tissue, possibly causing — or worsening — erectile dysfunction. Ischemic priapism, which accounts for about 90 percent of all episodes, typically causes a firm penile shaft but a soft penis tip. The erection often becomes painful after about two hours.

- **Nonischemic or “high-flow” priapism** — This is the result of an abnormally high amount of blood flow to the penis, usually as the result of a ruptured blood vessel from some sort of injury or trauma. With this type of priapism, the penis usually isn’t fully rigid or painful.

Permanent damage is unlikely because blood continues to circulate.

- **Intermittent ischemic priapism or “stuttering”** — This is a variant of ischemic priapism that goes away in less than about three hours. An episode warrants a trip to the doctor because it may mean you need to adjust a medication that you’re taking or it may be an early sign of an underlying disease.

Ischemic or nonischemic?

If you have an erection that doesn’t go away, you may be able to make it subside by taking a cold shower, applying a towel-covered ice pack to your penis, or by taking an oral decongestant containing pseudoephedrine.

But after about two hours, start getting ready to go to an emergency care unit. You’ll want to be treated before your erection has lasted four hours to give yourself the best chance of avoiding permanent tissue damage.

If you’re found to have ischemic priapism, treatment often takes a step-wise approach, beginning with:

- **Drawing old blood out of the penis** — Combining this with irrigation of penile blood vessels with a saline solution may relieve pressure and improve blood flow. However, this step is sometimes skipped.

- **Injection of a drug into the penis to constrict blood vessels** — This allows less blood to flow into the penis and more to flow out, thus the erection subsides.

- **Surgery** — As a last resort, a shunt may be implanted to reconfigure blood flow to the penis.

Nonischemic priapism typically requires only periodic monitoring, and no immediate treatment. Most of the time, it will subside on its own without treatment.

Surgical or other special procedures to correct the blood vessel problems are typically used as a last resort, but may be recommended for some men.

Avoiding another

If you’ve had an episode of priapism, avoiding a particular medication or treating the disease that triggered the priapism may help you avoid a recurrence.

If an injected erectile dysfunction drug caused your priapism, lowering the dose will often prevent a future episode.

If you have persistent episodes of priapism, your doctor may prescribe an oral or injectable drug that may stop it in its earliest stages. The muscle relaxant drug baclofen (Lioresal, others) or hormonal drugs are sometimes effective in preventing priapism from occurring.
Second opinion

Questions and our answers

Q: The last time I took penicillin — about 20 years ago — I developed an itchy rash on my arm. Should I still avoid it?

A: Maybe not. Even if you have a history of penicillin allergies, a penicillin allergy skin test is essentially the only way to know if you’re still allergic. For the few who are still allergic, a desensitization process that takes just a few hours at a hospital may allow them to safely take the antibiotic.

Penicillin and related antibiotics are some of the most useful classes of antibiotics available. In a small number of people, there remains a risk of a life-threatening reaction (anaphylaxis).

It recently become known that a history of penicillin allergies doesn’t necessarily mean that you can’t tolerate it now. Sensitivity to penicillin can go away over the course of five to 10 years. If a penicillin allergy test is negative, there’s a very low risk of an anaphylactic reaction and about a 2 percent risk of less severe reaction.

Q: On a CT scan for another purpose, my doctor saw a cyst in my liver. It scared me, but my doctor said not to worry. Should I worry?

A: No. Simple liver cysts are benign fluid-filled cavities in the liver and are present in about 5 percent of the population. They’re the most common “incidental” finding on computerized tomography (CT) scans or ultrasound scans of the liver that are used to image something else.

Usually they’re small, few in number and don’t cause any signs and symptoms or require any treatment. In fact, you may have had the cyst since birth. Rarely, larger or complex cysts may need to be monitored over time or treated.

Q: Are nonprescription, decongestant-type nasal sprays addictive?

A: Technically no — they’re not addictive. But they can cause problems that lead to a vicious cycle of using one on a daily basis. Generally, they’re best reserved for short-term use of no more than two or three days. Here’s why:

Nasal congestion occurs when the blood vessels in the lining of your nose expand due to a cold or allergies. Nonprescription decongestant nasal sprays — such as phenylephrine (Vicks Sinex, others) and oxymetazoline (Afrin, others) — reduce that congestion by narrowing these blood vessels.

The problem is that after a few days of relief, your nasal membranes become tolerant and less responsive to the spray. The typical response is to use more of the spray more frequently. Not using the spray can result in rebound congestion — basically, a period of brief relief followed by severe nasal obstruction.

To reverse tolerance to these sprays stop using them for several weeks. Saline nasal sprays — which don’t cause rebound congestion — may be helpful. If your congestion is related to allergies, try a nonprescription antihistamine decongestant tablet. Or, ask your doctor about prescription nasal sprays, such as azelastine (Astelin), budesonide (Rhinocort Aqua), fluticasone (Flonase), ipratropium bromide (Atrovent), mometasone (Nasonex) and triamcinolone acetonide (Nasacort AQ). These sprays are generally safe for extended use and don’t cause rebound congestion.

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