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Harvard Women's Health Watch

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Should women with normal cholesterol be taking a statin?

A major study suggests that statins also quell inflammation. Now what?

With February come thoughts of the heart, and this year you may be wondering if you should be doing more for yours. For instance, what about taking a statin, one of those medications best known for their ability to lower LDL (bad) cholesterol? Until recently, most of us with healthy LDL levels assumed we didn't need a statin to reduce our risk for cardiovascular disease. Last November, that assumption may have been proved wrong when a large international study—the JUPITER trial—found that the statin drug rosuvastatin (Crestor) slashed the rate of heart attacks and strokes in people with normal LDL cholesterol who had elevated levels of C-reactive protein (CRP), a marker of inflammation. There is increasing evidence that low-grade inflammation raises cardiovascular risk.

Many experts responded by recommending the prescription of statins for people whose LDL cholesterol levels would otherwise place them at low risk. Some have also urged wider use of a high-sensitivity blood test for low-grade inflammation—the hsCRP test—to identify people who might benefit. Others say those changes are not worth the cost, because people with low LDL have a very low risk of heart attack and stroke even when their blood tests show signs of inflammation. Some also think that the study, which lasted two years, was too brief to assure the safety and effectiveness of this unconventional use of statins.

The debate will continue, and there will undoubtedly be changes in the official guidelines for the assessment of cardiovascular risk and the preventive use of statins. But for now, here are some things to consider before seeking the hsCRP blood test or requesting a statin prescription.

The findings

The JUPITER (Justification for the Use of Statins in Primary Prevention: an Intervention Trial Evaluating Rosuvastatin) study involved 17,802 apparently healthy people, 40% of them women, from 26 countries. The men were ages 50 and over and the women, ages 60 and over—the ages when cardiovascular risk begins to rise. Participants had no history of heart attacks or strokes, and their LDL cholesterol levels were under 130 milligrams per deciliter (mg/dL). In fact, the average was 108 mg/dL, a level considered excellent for people with no cardiovascular risk factors. On the other hand, the participants had high CRP levels, ranging from 2 to 7 milligrams per liter (the level considered normal is less than 1 milligram per liter).

Subjects were randomly assigned to take either 20 mg of Crestor or a placebo pill daily and monitored for cardiovascular events—heart attacks, strokes, bypass surgery or angioplasty, hospitalization for unstable angina, and death from a cardiovascular cause.

JUPITER was designed to last for four years, but it was halted just short of two years, because the statin takers were doing so much better than those taking the placebo. They were 54% less likely to have a stroke, 48% less likely to have a heart attack, and 44% less likely to have any serious cardiovascular event, including cardiovascular death. Among the statin users, LDL levels dropped by an average of 50%, and CRP levels by an average of 37%. These levels were unchanged among the placebo takers. Side effects, such as muscle pain and problems with liver or kidney function, were the same in the two groups, although there may have been an increase in diabetes among those taking Crestor. ▸▸

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Results of the study were published in *The New England Journal of Medicine* (online Nov. 9, 2008, and in print Nov. 20, 2008). The study was funded by Astra Zeneca, the maker of Crestor, and patent rights to the hsCRP test are owned by the lead investigator, Dr. Paul M. Ridker, and Harvard-affiliated Brigham and Women's Hospital in Boston.

Broadening JUPITER's scope

Many experts are suggesting a go-slow approach to the use of statins by middle-aged adults with normal cholesterol and no history of diabetes or cardiovascular disease. Although Crestor reduced the risk of cardiovascular events to a statistically significant degree, the numbers involved were small. Among 17,802 participants, only 393 cardiovascular events occurred: 142 in the Crestor group (a 1.6% rate) and 251 in the placebo group (a 2.8% rate). If these results are confirmed, about 95 people would need to be treated for two years to prevent a single cardiovascular event. Public health experts have to consider such numbers because they must weigh the absolute benefits against the costs and risks. Crestor, which is not available in a generic form, costs about $1,200 a year, more than generic statins such as lovastatin and pravastatin.

Most people who take a statin take it for more than two years, so the JUPITER study leaves questions about the long-term safety of Crestor in people with above-normal CRP levels but low-risk LDL and no evidence of cardiovascular disease. The dose used in this study was higher than the typical starting dose of Crestor. We don't know if maintaining the very low LDL levels achieved with Crestor—55 mg/dl, on average—for longer than two years would continue to be healthy or reduce cardiovascular risk as much as it did in the study. Also, the possible small increase in diabetes risk found in study participants taking Crestor could mean trouble: diabetes is a major risk factor for heart attack, stroke, and death from cardiovascular disease.

It's uncertain whether the JUPITER results mean that more middle-aged people should be screened with the hsCRP test. Scientists are interested in finding new markers of risk for cardiovascular events such as CRP, because individual risk helps determine whether a person might benefit from less aggressive preventive measures, such as lifestyle modifications, or more aggressive ones, such as aspirin and a statin. We know from earlier studies that the hsCRP test improves cardiovascular risk assessment in some women who are considered low-risk on the basis of age, cholesterol level, blood pressure, smoking, and diabetes. This is important, because about half of all heart attacks and strokes occur in people without high cholesterol, and 15% to 20% occur in people with none of these traditional risk factors. But the JUPITER trial doesn't tell us anything new about the usefulness of the hsCRP test. Everyone in the study had high CRP, so no comparisons are possible. Nor can JUPITER tell us how CRP stacks up against other markers of cardiovascular risk. It was a trial of statin therapy, not hsCRP testing.

Finally, Crestor lowered LDL and reduced inflammation measured by hsCRP, but we have no way of knowing which effect was more significant in reducing cardiovascular risk. The results of JUPITER underscore the fact that cardiovascular risk is complex and no single factor (including LDL cholesterol) tells the whole story. The study is likely to spur a search for additional biomarkers as well as studies on the effects of targeted anti-inflammatory drugs.

What now?

Many women want to know if they should get the hsCRP test. The answer depends on overall cardiovascular risk. The time-honored Framingham model uses age, cholesterol levels, blood pressure, smoking status, and diabetes to calculate a woman's 10-year chance of having a heart attack. Women at high risk don't need the hsCRP test because they should be taking a statin anyway. Women at low risk don't need the test because it's still not clear that the benefit outweighs the cost and possible risk. But for women at intermediate risk, hsCRP results might help determine whether a statin, in addition to lifestyle changes, could reduce the risk of a heart attack or stroke.

To calculate your Framingham risk score, go to www.nhlbi.nih.gov/guidelines/cholesterol/risk_tbl.htm. If your risk is mod-

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erate—5% to 20%—consider getting the hsCRP test. Then you can reassess your situation using the newer Reynolds model (www.reynoldsriskscore.org), which adds hsCRP and some other factors to predict cardiovascular risk specifically in women. The model reclassifies many women whose Framingham scores place them at moderate risk—sometimes into a higher risk category, sometimes into a lower risk one.

Your reasons for taking a statin should still be your risk of having a heart attack. The guidelines for optimal LDL levels may change, based on the JUPITER results. To find out about current LDL cholesterol goals and when you should consider taking a statin, consult the Adult Treatment Panel III Guidelines developed by the U.S. National Cholesterol Education Program, available at www.nhlbi.nih.gov/guidelines/cholesterol/atglance.htm. Statins have revolutionized cardiovascular disease prevention, and you should certainly take one if you have the appropriate risk factors. But also do everything you can to keep your statin dose low through exercise and diet to lower your LDL cholesterol.

IN BRIEF

Hypnosis helps reduce hot flashes in breast cancer survivors

Envisioning a snow-capped peak, a walk down a mountain path on a winter day, or other "cool" images as part of hypnosis therapy helped ease hot flashes in breast cancer survivors, according to a recent study in the *Journal of Clinical Oncology* (Nov. 1, 2008).

Hot flashes and night sweats bother about 65% of breast cancer survivors, with many rating them as severe or even debilitating. Symptoms are sometimes so vexing that some women stop taking medications such as tamoxifen (Nolvadex) or anastrozole (Arimidex), which help prevent cancer recurrence but also trigger hot flashes. Estrogen, the most effective hot flash therapy, increases breast cancer risk and isn't prescribed for women with a history of breast cancer. And other, nonhormonal pharmacological agents used to treat hot flashes can have side effects. So finding safe alternative treatments is important. Now, results of a study led by researchers at Baylor University in Texas suggest that hypnosis holds promise as an alternative hot flash therapy.

In hypnosis therapy, a clinician guides the patient to focus inward and use her imagination and positive mental images to alter her perceptions and lessen her symptoms. The technique has proven helpful for relieving pain and anxiety and in treating addiction and other health problems.

For the *Journal of Clinical Oncology* study, researchers recruited 60 breast cancer survivors who reported having 14 or more hot flashes a week for at least a month. Half of the participants received no treatment; half received weekly, 50-minute hypnosis sessions, plus instructions for practicing self-hypnosis at home. The hypnosis sessions featured relaxation and individually tailored "coolness" imagery.

Fifty-one women completed the five-week study. Those who received hypnosis experienced a 68% drop in hot flash scores (a measure taking into account both hot flash frequency and severity)—far exceeding the slight improvement (a 9% drop in scores) experienced by the untreated group. At the end of the study, women receiving hypnosis therapy had, on average, about four fewer hot flashes per day than they'd had at the start. Compared with the no-treatment group, they also felt less anxious and depressed and reported that hot flashes caused them fewer problems with sleep and daily activities.

This study and other research on "mind-body" approaches typically face one challenge: finding a suitable control group. To make a fair comparison, a control "treatment" should give the same amount of attention or contact time as the experimental treatment under study and should be credible enough that participants would believe it could work. That's important, because attention alone and the expectation of a possible benefit have been shown to lessen hot flash frequency (the so-called placebo effect). In this study, the control group got no treatment at all. The study authors report that they've addressed this issue in a clinical trial currently under way.

Several other mind-body treatments for quenching hot flashes in postmenopausal women also appear promising, such as yoga, relaxation therapy, paced respiration, and cognitive behavioral therapy, a form of therapy that works to change negative thought patterns to enhance a positive state of mind. In addition, while this study focused on the value of hypnosis for breast cancer survivors, it would likely help others who experience troubling hot flashes. Moreover, hypnosis and other mind-body therapies are relatively inexpensive and have few (if any) unwanted side effects.

If you want to try hypnosis, be sure to choose a qualified therapist—one who is licensed (not just certified) to practice hypnotherapy. Or check for membership in the American Society of Clinical Hypnosis or the Society for Clinical and Experimental Hypnosis, two nationally recognized organizations for licensed professionals in this field. These organizations also provide referrals to qualified hypnotherapists.

Selected resources

American Society for Clinical Hypnosis
630-980-4740
www.asch.net

Society for Clinical and Experimental Hypnosis
617-469-1981
www.sceh.us

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Research finds that many older people can't get up from a fall

About 35% of people over age 65 fall in their homes at least once each year. That figure increases to 50% for those ages 75 and over. We have less information on falls among people over age 85, who are mostly women and now make up the fastest-growing segment of the elderly population. But one recent study of women and men ages 91 to 105 found that about 60% had at least one fall in the course of a year.

Most of the resulting injuries are minor, but falls can also cause major lacerations, fractures, head trauma, and other injuries that may lead to hospitalization, disability, nursing home care, and premature death. Falls also have psychological consequences. Fear of falling and an associated general loss of confidence can result in depression, isolation, and a decline in physical function caused by lack of activity.

Not surprisingly, there has been considerable research on how to prevent falls in older people. Recommended preventive strategies include strength training and balance work, vision checks, medication review, and home modifications. But there is no way to prevent all falls, so it's important to limit their complications. A major source of complications is lying on the floor for a long time afterward, a risk that increases with age and declining muscle function. For older people in particular, it can result in pneumonia, pressure sores, dehydration, hypothermia, and even death.

A new study shows that lying on the floor for a long time after falling is more common among the "oldest old"—those ages 85 and over—than previously thought, as well as strongly associated with serious injuries, hospitalization, and nursing home care. Results of the study were published in the British journal *BMJ* (Nov. 17, 2008).

Selected resources

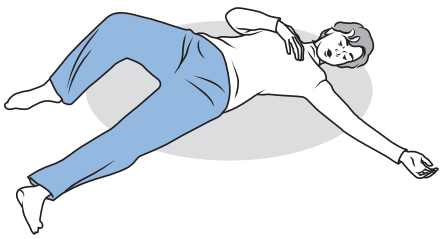
Centers for Disease Control and Prevention
800-232-4636 (toll-free)
www.cdc.gov/ncipc/preventingfalls

National Institutes of Health, Senior Health
http://nihseniorhealth.gov/falls/toc.html

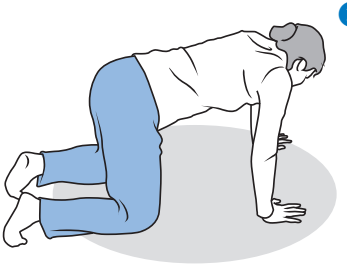
The study

Researchers at the University of Cambridge in England collected data for one year on falls among 90 women and 20 men participating in the Cambridge City over-75s Cohort Study, a long-term investigation of aging and health. Investigators noted whether participants were injured, how long they were on the floor, whether they had called for help, and whether they were able to get up on their

How to get up from a fall by yourself



1. Lie quietly for a few moments. Take some deep breaths, gather your thoughts, and take stock of your situation. If you think you're not hurt and can get up safely, roll over onto your side and rest for a moment, to allow your blood pressure to adjust.



2. Slowly get up on your hands and knees, and crawl over to a sturdy chair.

3. Support your upper body by placing one hand (or arm), then the other, on the seat of the chair. Bend the knee of your stronger leg, and slide that foot forward so that it's flat on the floor. Keep your other knee on the floor.

4. Slowly rise from the kneeling position and turn yourself around to sit in the chair. Once again, rest for a moment. Assess your situation. Call for help if you need it.

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own. Hospitalizations and moves to extended care facilities were also recorded, along with information on cognitive and physical function from earlier surveys and health assessments.

During the year of the study, 60% of participants reported falling (most fell at least twice); of those who fell, 88% said they were alone at the time. Four out of five needed help getting up, and 30% remained on the floor for over an hour. Those who lay on the floor for a long time, many of whom had cognitive problems, were at the greatest risk for serious injury, repeated falls, hospital admission, and long-term care during the year of follow-up. Difficulty getting up from a fall was strongly associated with a history of mobility problems, such as difficulty walking or climbing stairs. Most of the participants had access to call alarm devices, but the devices often went unused. (Nearly all the people who lay on the floor the longest had an alarm system that they didn't trigger.) The reasons given during follow-up interviews were an inability to activate the system, a fear of being hospitalized, and a desire to get up unaided.

The authors suggest that fall prevention programs should teach older people how to get up from a fall. They also call for more research on alarm system designs. In particular, automatic fall detectors that don't rely on wearer activation could be a boon to the cognitively impaired, who were the least likely in this study to summon help.

More tips for reducing the complications of falls

- If you're at home a lot, consider getting a medical alert system that allows you to activate a call by pressing a wearable button (models for women include bracelets and necklaces). A loudspeaker and microphone installed in your telephone permit two-way communication between you and a trained operator who will alert emergency personnel, contact a relative or friend, and arrange for other services. Medical alert systems vary in quality and price, so it's important to shop around.
- If you don't have a medical alert system and are alone a lot, carry a cell phone or other cordless phone with you at all times. Or install telephone extensions in several rooms, and place the telephones at a level you can reach from the floor.
- If you live alone, arrange for a friend or family member to check in with you daily at a particular time. Make sure she or he has a key, in case you don't respond in a reasonable length of time.
- If you've ever fallen, and especially if you've fallen more than once, let your clinician know, so that you can discuss ways to avoid future falls.
- Hip protectors (undergarments with extra padding at the hips) are often promoted as a way to reduce the risk of hip fractures from falls. Few of these have undergone rigorous testing, and studies of their effectiveness haven't yielded consistent results. Nevertheless, they may provide some protection for very elderly individuals who wish to use them.

FOOT CONDITIONS

Recognizing and treating Morton's neuroma

Almost everyone's feet take a pounding throughout life, but women have more foot problems than men do. One of those problems is Morton's neuroma. The name might suggest a cancer, as in sarcoma or lymphoma, but Morton's neuroma is not a cancerous condition. The cause is a thickening of the nerve tissue between the bones at the base of the toes. Symptoms include pain and burning in the ball of the foot and often numbness in the toes. Morton's neuroma is about 10 times more common in women than in men; women in their 30s and 40s who wear high-fashion shoes are particularly vulnerable. To relieve the symptoms and treat the condition, you generally start by making changes in your footwear. If the pain persists, there are other approaches—including, as a last resort, surgery.

What causes Morton's neuroma?

A neuroma in the foot develops when a nerve thickens in response to chronic irritation caused by injury or compression. Most often affected are branches of the plantar nerve, which supplies feeling to the bottom of the foot (see illustration, page 6). Morton's neuroma, named after a doctor who described the condition in 1876, is a neuroma that usually occurs between the metatarsal bones of the third and fourth toes and occasionally between the second and third toes.

In most cases, shoes are the source of the problem. Narrow, pointy shoes can squeeze bones, ligaments, muscles, and nerves in the forefoot, causing pain and inflammation. High heels aggravate the problem by shifting your weight forward, increasing pressure on the ball of the foot. Less often, Morton's neuroma develops because of physical activity, such as running or racquet sports or the kind of repetitive, traumatic stress that professional ballet dancers undergo. Sometimes the cause is an injury or an inborn structural defect of the foot.

Morton's neuroma often starts off as an ache in the ball of the foot and progresses to burning pain (often described as shooting or electric, like intense pins and needles) and numbness in the third and fourth toes. You may feel as if a hot coal or a pebble is stuck inside the ball of the foot. The discomfort becomes worse when you walk and eases if you rest and remove your shoes.

To diagnose Morton's neuroma, a foot specialist may start by squeezing your foot from the sides with one hand while pressing the thumb of the other hand on the bottom

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of the foot, between the third and fourth metatarsal bones. The test is positive if it produces a clicking sound or sensation, called Mulder's sign. (It's also likely to elicit some pain!) If the physical examination is inconclusive, further testing may be needed—for example, ultrasound or MRI.

Treating the condition

Treatment options range from conservative—changing your shoes, for example—to invasive, such as surgery. The usual strategy is to try all the conservative measures before considering surgery, although there's little evidence from controlled trials on which approaches are most effective.

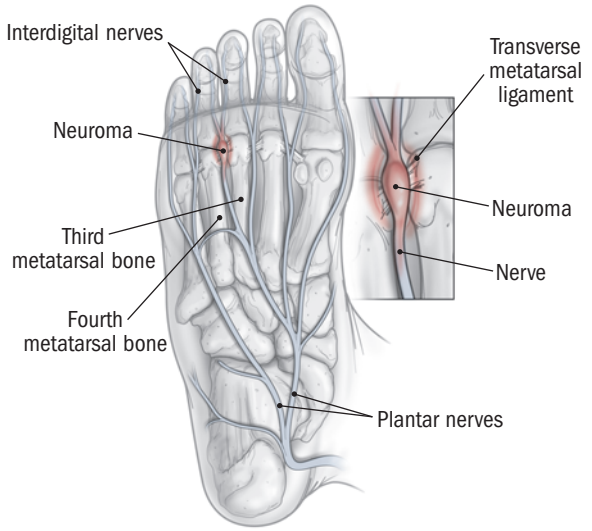
Better footwear. One of the first and most important steps you can take is to wear shoes with a wide toe box and a low heel. A foot care specialist may also recommend using a neuroma pad (an adhesive pad placed under the forefoot), which spreads the metatarsal bones and reduces pressure on the nerve. Custom-made devices fitted into your shoes, called orthotics, may also help correct structural problems and reduce compression.

Pain relievers. You can often reduce inflammation and relieve pain with over-the-counter nonsteroidal anti-inflammatory agents, such as ibuprofen (Motrin, Advil), naproxen sodium (Aleve), or aspirin. It may also help to massage the affected area with ice for 20 minutes once or twice a day. (To make handy ice massagers, freeze water in small paper cups.) If the pain is severe, an injection of a local anesthetic combined with a corticosteroid usually provides relief, but corticosteroids can cause tissue atrophy and should not be given indefinitely. If pain persists, your clinician may suggest a prescription medication that addresses nerve pain, such as the antidepressants amitriptyline (Elavil) or duloxetine (Cymbalta) or the anti-epileptic drugs gabapentin (Neurontin) or pregabalin (Lyrica).

Surgical procedures. Foot specialists typically recommend a combination of conservative measures for at least a year before considering surgical removal of the nerve. Traditionally this is done through an open incision in the top of the foot. A newer technique called endoscopic decompression speeds recovery by the use of specialized instruments and tiny incisions. Be aware that once the nerve is gone, you will permanently lose feeling in the toes it served.

Most people who choose surgical treatment are satisfied with the results, but as many as 20% get no relief. In a small percentage of surgical patients, the "nub" of normal nerve tissue that remains develops into another neuroma (called a stump neuroma), which may require further surgery.

Anatomy of Morton's neuroma



Along the bottom of the foot, the nerves of the toes pass between the metatarsal bones. Morton's neuroma often arises in the space between the metatarsal bones of the third and fourth toes, just before the nerve divides into two branches. Problems occur in this space partly because this nerve is thicker here than the nerves between the other toes, and it's confined from above by the ligament that holds the metatarsal bones together (the transverse metatarsal ligament).

PREVENTION

Have your vaccinations had a check-up lately?

Don't assume vaccinations received during childhood will protect you for the rest of your life.

You were probably vaccinated years ago against a number of infectious diseases. The government requires it for entry to schools, many camps, colleges, and some occupations. Although most vaccinations are given in the first couple decades of life, even adults need an occasional shot in the arm, for several reasons. Some of us were never vaccinated as children. Vaccines are available now that were not when today's adults were young. As you age, immunity can fade, leaving you susceptible to serious disease caused by common infections. And you may find yourself traveling to areas where certain infectious diseases are much more common than they are where you live.

The CDC's Advisory Committee on Immunization Practices (ACIP) has added several new vaccines to the list of those recommended for adults. Not everyone needs all of these vaccines. For example, the recently approved vaccine against sexually transmitted strains of the human papillomavirus (HPV) that cause cervical cancer is recommended only for girls and young women ages 9 through 26. That's because it works best if given before a young woman becomes sexually active and is exposed to HPV. On the other hand, the zoster (shingles) vaccine is recommended for ev-

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eryone over age 60 to prevent shingles and reduce its excruciating pain (post-herpetic neuralgia).

Vaccination protects not only you as an individual but also the entire community, through a phenomenon called herd immunity. When you become infected, your vaccine-primed immune system limits the time you remain contagious, which minimizes the risk that you'll infect others. If everyone around you has been vaccinated, you're less likely to get infected. And if enough members of a community have vaccine protection, everyone in that community—even the unvaccinated—is less likely to get sick. So stay up to date with your vaccinations (see the chart below). And be sure to check in with your clinician well before traveling outside the country for any additional shots you may need (for more informaton, visit the CDC's Traveler's Health Web site: www.cdc.gov/travel).

Selected resource

Viruses and Infectious Diseases: Protecting yourself from the invisible enemy, a Special Health Report from Harvard Medical School, is available for $18. To order, call 877-649-9467 (toll free) or go to www.health.harvard.edu/VID.

Commonly recommended vaccines for adults age 50 and over

Vaccine/dose	Who should get it?
Influenza* 1 dose annually in the fall or winter	Anyone who wants to reduce the risk of becoming ill with the flu or transmitting it to others.** Should not be given to anyone who's had an anaphylactic reaction to eggs or the vaccine itself, or to anyone who contracted Guillain-Barré syndrome within 6 weeks after a previous influenza vaccination.
Pneumococcal 1 or 2 doses	Anyone age 65 or older; anyone with a chronic illness, a weakened immune system, or a removed or damaged spleen; nursing home residents; anyone at high risk for pneumococcal disease. Should not be given to anyone who's had an anaphylactic reaction to this vaccine.
Tetanus, diphtheria, pertussis (Td/Tdap) 3 doses spaced at 0, 1–2 months, and 6–12 months; boosters every 10 years	Adults under age 65 who haven't been vaccinated should receive an initial 3-dose series with 2 doses of Td and 1 of Tdap, then regular Td boosters every 10 years thereafter. Previously vaccinated adults should have boosters every 10 years, including a one-time Tdap booster as early as 2 years after the last Td booster, to boost pertussis immunity. This is especially important for people who are in close contact with infants. Should not be given to anyone who's had an anaphylactic reaction to this vaccine.
Measles, mumps, rubella (MMR) 1 dose	Anyone born after 1956 who hasn't been vaccinated. Should not be given to pregnant women, to anyone with a weakened immune system, or to anyone who's had an anaphylactic reaction to this vaccine.
Zoster (shingles) 1 dose	Adults ages 60 and older. Should not be given to pregnant women, to anyone with a weakened immune system, or to anyone who's had an anaphylactic reaction to this vaccine.
Varicella (chickenpox) 2 doses, 4 to 8 weeks apart	Health care workers born before 1980 who haven't had chicken pox or been vaccinated against it. Should not be given to pregnant women, to anyone with a weakened immune system, or to anyone who's had an anaphylactic reaction to this vaccine.
Hepatitis A 2 doses, 6 months apart	Anyone who wants to be immune to hepatitis A infection; anyone with chronic liver disease or a clotting factor disorder; people whose work or lifestyle exposes them to hepatitis A virus; certain international travelers and food handlers. Should not be given to anyone who's had an anaphylactic reaction to this vaccine.
Hepatitis B 3 doses, with 4 weeks between doses 1 and 2 and 8 weeks between doses 2 and 3	Anyone wishing to become immune to hepatitis B infection; anyone with chronic liver disease, HIV infection, end-stage renal disease; people whose work or lifestyle exposes them to hepatitis B. Should not be given to anyone who's had an anaphylactic reaction to this vaccine.
Meningococcal 1 dose	International travelers to countries where meningitis is widespread; laboratory workers exposed to meningococcal bacteria; anyone with terminal complement component deficiency. Should not be given to anyone who's had an anaphylactic or neurological reaction to this vaccine or any of its components, including diphtheria toxoid.

* Trivalent inactivated influenza vaccine only. The live, attenuated intranasal influenza vaccine is not recommended for people over age 50.
** Health care workers, caregivers, and people in institutional settings should all be vaccinated.
Source: Adapted from the "General Recommendations on Immunization" of the Immunization Practices Advisory Committee, CDC, reviewed April 2008, available at **www.immunize.org/catg.d/p2011.pdf**.

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Can I have endometriosis even after a hysterectomy?

Q I had a laparoscopic supracervical hysterectomy a year ago. Six months ago, I started having severe pelvic pain. It seems to develop a few days before I would normally have had a menstrual period (I still have both ovaries). Is it possible to experience symptoms of endometriosis after a hysterectomy? I also wonder if I might have pelvic adhesions and this is causing the pain.

A Your diagnosis is right on track. When a woman's symptoms are cyclical, it suggests a hormone-related phenomenon—in this case, endometriosis. Endometriosis is a condition in which tissue similar to the lining of the uterus (the endometrium) becomes implanted on surfaces in the abdominal cavity, including the outside of the uterus, ovaries, bowel, and nearby organs. Like the endometrium, this wayward tissue builds up and sheds monthly in response to the rise and fall of hormones during the menstrual cycle. But unlike menstrual fluid, which escapes through the vagina, endometrial blood and tissue remain trapped in the abdominal cavity, triggering pain, inflammation, and sometimes adhesions, a type of scarring (which can also result from surgery). Although adhesions could be contributing to your symptoms, they don't explain them.

You didn't say whether you underwent hysterectomy for endometriosis. (Fibroids, abnormal uterine bleeding, and endometriosis are the most common reasons for the procedure.) Presumably an attempt was made to remove all visible, diseased tissue. But endometriotic implants can be microscopic or they may be located where removal is dangerous. The hormones that your ovaries continue to produce may be triggering the proliferation of tissue from these areas and the associated and sometimes gut-wrenching pain.

One way to determine whether your pelvic pain is cyclical and therefore hormonal is to chart it. Keep track of your symptoms on a calendar, and see if there's a pattern. Does the pain begin about the same time every month? Does increased breast tenderness appear at the same time every month in relation to the beginning of the pain? Pain associated with the menstrual cycle typically starts 12 to 14 days after ovulation, so another approach would be to find out when you're ovulating. You can do this by monitoring your basal body temperature (temperature upon waking), which rises about one-half degree right after you ovulate, remains elevated for the next 10 to 14 days, and then drops slightly. That's when you'd normally start to menstruate, and if you have endometriosis, when you'd expect to feel pain. (For more about how to chart your basal body temperature, visit www.health.harvard.edu/womenextra.)

It may take two or three months to "prove" that cycle-related hormone changes are the culprit. Once you have an answer, take your findings to your clinician. (If your pain isn't cyclical, she or he will want to look into other causes of pelvic pain, such as an ovarian cyst or a bowel problem.)

There are several ways to manage endometriosis pain, depending on its severity. Some women get relief with an over-the-counter pain medication, such as ibuprofen (Motrin, Advil), aspirin, or acetaminophen (Tylenol). If that doesn't help, your clinician can prescribe a stronger pain reliever, such as an opioid (narcotic) medication. Another option is to suppress your cycles by taking low-dose birth control pills continuously—that is, without a placebo week. Progesterone-only pills are another possibility, although they can have some bothersome side effects, including bloating, weight gain, and mood changes.

GnRH agonists (Lupron, Synarel, and others), which stop the production of estrogens, are often used in the form of injections or a nasal spray to treat severe endometriosis pain. Long-term use of these drugs can result in bone loss and menopausal symptoms such as hot flashes; to help counter these effects, clinicians sometimes prescribe small amounts of estrogen or progestin. A final alternative is to have your ovaries removed, but I would be reluctant to do that. Ovarian hormones, even in small amounts, could be beneficial through the life span in ways that are currently unknown. There is already evidence that removing the ovaries before age 65 increases the risk of heart disease and hip fractures.

Marcie Richardson, MD.

Martha K. Richardson, M.D.
Advisory board, Gynecology, *HWHW*

Selected resources

The Endometriosis Association
414-355-2200
www.endometriosisassn.org

Send us a question for By the way, doctor

Harvard Women's Health Watch
10 Shattuck St., 2nd Fl.
Boston, MA 02115
womens_health@hms.harvard.edu

Because of the volume of mail we receive, we can't answer every letter, nor can we provide personal medical advice.

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