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WINTER 2012

Insight and news from Johns Hopkins Medicine

Every lung
cancer expert
you need under
one roof

Treating the
tingle of carpal
tunnel syndrome

Not all
hernia surgeries
are alike



Salt Shakedown

The dangerous truth about too much sodium

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Relief for Sinus Sufferers

DO YOU HAVE frequent nasal congestion or problems with your sense of smell? For some people, it's a periodic annoyance. For others, it's a chronic problem.

Chronic sinusitis is defined as a condition that affects the nose for 12 weeks or longer, says Murugappan "Murray" Ramanathan Jr., M.D., a Johns Hopkins rhinologist.

"The lining of the nose becomes inflamed and nasal polyps can form," he says, "which can cause secretions to get caught in the sinuses and sometimes become infected."

Medical therapy is generally the first treatment option. If that doesn't help, surgery may be the next step. Sinus surgery

is performed endoscopically, using a thin tube with a tiny camera and instruments inserted through the nostrils. The procedure can reduce inflammation, repair structural problems and remove polyps, which can allow topical medications to better access the sinuses.

There is another endoscopic procedure that uses a balloon instead of instruments to dilate the opening of sinuses, but, Ramanathan says, "not all patients are candidates for this procedure, especially those with nasal polyps."



Watch and listen to Johns Hopkins otolaryngologists in the seminar "Treatment Options for Sinus Relief." Visit hopkinsmedicine.org/intlseminars.

HEALTH EDUCATION FROM THE EXPERTS

Johns Hopkins Medicine is pleased to offer a variety of health education events featuring medical experts from across its health system and primary and specialty care networks.

Through seminars and screenings, Johns Hopkins will help attendees learn about important health and wellness topics and medical conditions, including the most current information



about risk factors, symptoms and the latest available treatments. Topics include cardiovascular conditions, back and joint pain, breast cancer, brain tumors and more.

In-person events are held at locations across the greater Baltimore and Washington, D.C., region. Johns

Hopkins also offers an array of online events, from live webinars and chats to videos of past seminars.

Visit hopkinsmedicine.org/intlseminars for a calendar of upcoming events and a video archive.

Recognizing and Treating A SKULL BIRTH DEFECT

Q What is *craniosynostosis*?

A It's a birth defect caused when one or more of the cranial sutures—the fibrous joints between the bones of the skull—close before brain growth is complete. The brain can't grow in its natural shape, which leads to an abnormally shaped skull. It can also cause developmental delays, seizures and blindness.

Q Is there a treatment?

A Surgery is performed to reshape the head, and cranial molds are sometimes used to reshape the skull and facilitate brain growth after surgery.

Watch the story of a father and son who were both born with craniosynostosis, and learn about new minimally invasive surgical options available at Johns Hopkins. Visit hopkinsmedicine.org/neuro/ahn_cranio.



To find more questions answered by Johns Hopkins experts and others, go to sharecare.com, a Web site designed to simplify your search for quality information on health and wellness topics.



In Search of Better Parkinson's Treatment

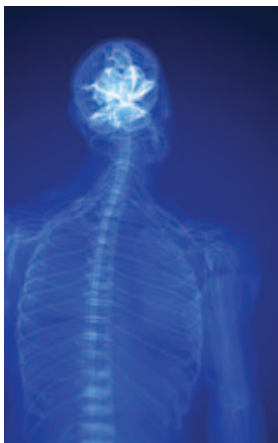
PARKINSON'S DISEASE is a progressive neurological disorder that causes debilitating symptoms. Although treatment can improve quality of life, nothing can stop the disease's progression. Yet.

Johns Hopkins is one of 21 centers participating in a study sponsored by the Michael J. Fox Foundation for Parkinson's Research. The Parkinson's Progression Markers Initiative is designed to identify Parkinson's disease biomarkers, which are biological characteristics that can identify a disease or track its progression.

"We currently don't have a way to change the course of Parkinson's," says neurologist Zoltan Mari, M.D., the principal investigator at Johns Hopkins. "Identifying good markers could revolutionize the way we treat the disease by helping us slow its progression."

Johns Hopkins is recruiting people who have received a recent diagnosis of Parkinson's disease, as well as people who do not have Parkinson's (for the control). The study involves imaging tests and blood samples. For information on enrollment, contact Arita McCoy, R.N., B.S.N., at +1-410-955-2954 or amccoy6@jhmi.edu.

Watch "Updates in Medical Management and Surgical Options for Parkinson's Disease" with Johns Hopkins Parkinson's experts William Anderson, M.D., and Zoltan Mari, M.D. Visit hopkinsmedicine.org/intlseminars.



Design with Your Comfort in Mind

Being in the hospital is never easy, but being cared for in a beautiful, welcoming and tranquil environment can help to reduce stress and promote healing. The Johns Hopkins Hospital's new 1.6-million-square-foot patient care buildings, opening in April 2012, will have landscaped gardens, an extensive and carefully selected art collection, and all-private patient rooms.

In planning the Sheikh Zayed Tower and The Charlotte R. Bloomberg Children's Center, the architects, designers, doctors and nurses focused on comfort for patients



and their families as a top priority, and the result is serene space with a clean, contemporary edge. Visitors will sense the design inspiration as they pass the gardens outside and enter the welcoming lobbies filled with natural light from the hospital's new main entrance.

Design features to minimize noise include acoustical ceiling tiles and fabric-wrapped panels, rubber floors in the neonatal intensive care unit, and handheld mobile devices instead of an overhead paging system.

For more information about the healing environment at The Johns Hopkins Hospital, visit explorehopkinshospital.org.

Battle of the Bulge

Hien Nguyen, M.D., FACS, assistant professor of surgery at Johns Hopkins, explains the expert factor in hernia repair

Q | Why should I be concerned about a hernia?

A hernia is a condition in which tissue comes through a weak area of the abdominal wall, most commonly the groin. This causes a visible bulge that enlarges over time. The herniated tissue can also twist and cut off its own blood supply, which can cause extreme pain and may lead to a surgical emergency. In the U.S., some 800,000 patients undergo operations for hernias annually, and most of these patients are men older than age 45. The occurrence of an incisional hernia, where a bulge develops below a scar line after an operation, can be as high as 20 percent.



For more information, appointments or consultations, call **+1-443-287-6080**.



Q | How is treatment different at Johns Hopkins?

We have a variety of experienced hernia surgeons. Many patients are also sent to us by other physicians for repair of hernias that have recurred. (Scar tissue can form inside the abdomen and distort normal anatomy after an operation, which increases the complexity of repair for recurrent hernias.) There is an emphasis on performing minimally invasive surgery for appropriate patients. Often, we will repair these large hernias with small incisions and advanced laparoscopic techniques. This usually leads to less pain after surgery and faster recovery time. Many options exist for complex hernia repair, including component separation, which can dramatically reduce the recurrence rate for large hernias. ■

Q | How do I know if I am at risk?

For many people, hernias are hereditary. Any circumstance, however, that greatly increases the pressure within the abdomen for an extended period will increase this risk. These circumstances include obesity, chronic constipation, frequent heavy lifting, pregnancy and chronic coughing. Smoking also has been shown to increase the risk of developing a hernia.

Q | When should I see a doctor?

If you have an enlarging bulge that is associated with pain or symptoms such as nausea or vomiting, then you should be evaluated by a medical professional to determine if treatment is needed. With few exceptions, hernias will continue to enlarge. As this happens, more tissue will push through and intestines can become stuck in the defect. Without adequate blood flow, the intestines may be constricted, and this can be a very serious surgical emergency.



Uncomfortably Numb

Specialized treatment of a prevalent hand nerve disorder can prevent long-term damage

DO YOU FREQUENTLY HAVE numbness and tingling in your hands and fingers or feel as if your hand has fallen asleep? Or do you notice your hand's motor skills aren't what they used to be? These symptoms might indicate carpal tunnel syndrome, or CTS, which can cause long-term damage if ignored.

In America, an estimated 3 to 6 percent of the population suffers from this nerve disorder, which is caused by compression of tendons and one of the wrist's main nerves in the carpal tunnel, the passageway for nerves from the forearm to the palm of the hand. One of the most common forms of surgery in the United States is hand surgery to correct CTS.

No studies have conclusively proved that repetitive motion causes CTS. There is some evidence that hand-tool-based occupations have a stronger relationship with occurrence of CTS. People who have diabetes, are pregnant, have rheumatoid arthritis, or are more prone to swelling in general seem more likely to develop the disorder.

"Really, anybody can get it, depending on how much room they have in their carpal canal and how much volume all of the tendons and nerves occupy at any time," says Jaimie Shores, M.D., assistant professor of plastic and reconstructive surgery at Johns Hopkins.

If you think you might be suffering from CTS, see your primary care physician, who can refer you to a neurologist for nerve testing or to a hand

RELEASING TRIGGER FINGER

A common nerve disorder that often appears alongside carpal tunnel syndrome is trigger finger, where swelling of the tendons of the index finger or thumb results in soreness or locking of the digit in a flexed position. The disorder usually can be treated initially through the use of nonsteroidal anti-inflammatory drugs or steroid injections, though surgery is an option for those who have severe cases, who aren't candidates for nonsurgical treatments or who don't experience relief from less-invasive methods.

surgeon. Often, hand pain is not CTS but another nerve disorder, tendinitis or arthritis. If you receive a diagnosis for CTS, however, many treatment options are available. Wrist splints or a steroid injection may provide relief for people with mild disease. More severe cases may require surgery, Shores says.

"Johns Hopkins has fellowship-trained hand surgeons who specialize in hand, wrist and nerve disorders of the upper extremity [arm]," he says. Traditional open surgery involves a 1.5- to 4-inch incision, though Shores says most patients elect endoscopic surgery because incisions are smaller.

Shores says endoscopic surgery is just as effective as open surgery and patients tend to heal faster. "Some people's hands are better suited to open surgery," he adds, noting that people with small hands may not be eligible for an endoscopic procedure.

"That's why having a qualified hand surgeon who knows a lot of ways of treating CTS is important," Shores adds. "No one technique is right for absolutely every patient. And sometimes what patients think is carpal tunnel syndrome is something else entirely. But chances are, we treat that, too." ■



To learn more about carpal tunnel syndrome and other medical conditions, visit hopkinsmedicine.org/healthlibrary. For more information, appointments or consultations, call +1-443-287-6080.



SALT SHAK

*S*alt is all around us—even if you don't live near the ocean or touch a saltshaker. That's because our food is usually loaded with it right from the supermarket. And that, argues two leading

Johns Hopkins physicians, is a big contributor to a public health crisis.

"It's a huge problem," says Lawrence Appel, M.D., director of Johns Hopkins' Welch Center for Prevention, Epidemiology and Clinical Research. "As salt increases, so does blood pressure, and blood pressure is one of the leading causes of cardiovascular disease and stroke."

The good news, says Gordon Tomaselli, M.D., chief of cardiology at Johns Hopkins and president of the American Heart Association (AHA), is that by being a bit more aware of our food choices, we can significantly reduce these diseases. "A number of studies show that just by reducing salt, we can lower blood pressure across the population enough to have a profound effect on lowering our risks," he says. >

SUPER-MARKET SAVVY

Can you spot the hidden sodium in the foods that you buy every day at the grocery store? Discover which foods are best to eat, and which foods or aisles you should avoid. Join a Johns Hopkins dietitian for a grocery store tour at hopkinsmedicine.org/hidden_salt.

KEEDOWN

Top researchers from Johns Hopkins—including the American Heart Association president—tackle the dangerous trend of too much sodium

THE SALT-STROKE CONNECTION

HOW TO HALT A TREND

Around the world, adults take in an average of about 2 teaspoons of salt a day from food, and about half of that—5,000 milligrams' worth—is sodium, which is what causes all the trouble. "Because of that link between sodium and blood pressure, salt ends up having adverse consequences on the heart, brain and kidneys," Tomaselli notes. For that reason, he says, the American Heart Association urges people to keep sodium consumption under 1,500 milligrams a day, less than a third of the current average intake.

Contrary to what many people think, cutting salt usually isn't simply a matter of saying no to the shaker at the dinner table.

"The real problem is that most of the food we buy already has a lot of salt in it," Tomaselli says. "So while you do want to avoid adding a lot more at the table, the real goal is to find foods at the store that are low in salt to begin with."

BECOME LABEL-CONSCIOUS

Because people are accustomed to heavily salted food, he notes, low-salt versions of the same foods can at first seem less tasty—and that's why the food industry has been reluctant to cut back on the salt. But we get accustomed to foods with lower salt and begin to prefer them over the higher-salt versions, and the enormous health benefits of cutting down are more than enough reason to make the switch. "Once people start demanding lower-salt foods," Tomaselli says, "the industry will respond."

The first step in cutting down, he says, is to be aware of how much is in the food we buy. That means looking at labels to see how much sodium is in each item, while keeping the 1,500-milligrams-per-day limit in mind.

"If a single serving of food contains the entire amount of sodium you're supposed to have in a day, you should try to make a better choice," he says. Foods aren't naturally salty, he adds. The salt is put in during processing

When it comes to the health benefits of lowering our salt intake, the one that often gets the most attention is the reduced risk of heart disease. Although that benefit is indeed enormous, especially given the prevalence of heart disease, the link between lowering salt intake and reducing the risk of stroke may be even stronger.

"The list of risk factors for heart disease and stroke are similar," says Gordon Tomaselli, M.D., chief of cardiology at Johns Hopkins. "But salt raises blood pressure, and while elevated blood pressure is certainly a big risk factor for heart disease, it's probably a bigger one for stroke."

The payoff from averted stroke may also in some ways be even larger than that from averting heart disease. "Heart attacks are very serious and can have big consequences, but people frequently recover," notes Lawrence Appel, M.D., director of Johns Hopkins' Welch Center for Prevention, Epidemiology and Clinical Research. "On the other hand, the consequences of stroke can be huge, creating enormous disabilities that can last a lifetime."

Even though there are more heart attacks than strokes around the world each year, he adds, the costs added to the health system from strokes are likely higher because of the extensive long-term care that stroke patients usually require.

"Preventing just a few strokes can result in big savings," Appel says, measured in reduced costs to the health system and in lives touched.

at food plants, which means less-processed foods such as fresh fruits and vegetables are better choices than their frozen or canned cousins that often include high-sodium sauces.

EVERY AMOUNT COUNTS

Those who downplay the health benefits of lowering salt intake, including researchers who in late 2011 suggested it could raise cholesterol and other heart disease risk factors, are a small minority of experts. Appel notes that evidence clearly links salt intake to elevated blood pressure and thus to disease risk.

"To casually say we don't know that it's true unless we do the big, controlled trials is to be extremely shortsighted," he says. "Ninety percent of people will develop elevated blood pressure at some point, and it just doesn't make sense to say that we should only try to lower salt for those people we know are most vulnerable."

Besides improving health, he adds, achieving even small reductions in a person's average blood pressure through lowered intake would lead to big cost savings in health care.

Tomaselli goes to great lengths to straighten out another possible source of confusion over lowering salt intake. The U.S. Food and Drug Administration recommends limiting daily sodium intake to 2,300 milligrams,



Watch and listen to Johns Hopkins cardiovascular experts discuss heart disease prevention and warning signs at hopkinsmedicine.org/intlseminars.



nearly 50 percent higher than the AHA's recommended maximum of 1,500 milligrams. (Comparatively, the World Health Organization recommends a daily limit of 2,000 milligrams.)

"While 2,300 milligrams would be an improvement, we really believe that 1,500 milligrams is the right target for the vast majority of people," he says. "Taking in 2,300 milligrams of sodium is still too much."

THE POWER TO DRIVE CHANGE

We have a long way to go to reach the American Heart Association target. But Tomaselli says he thinks awareness of the health risks of high levels of sodium is growing.

"The AHA program and other programs to get the word out are beginning to get some traction," he says. The real improvement will come when the food industry starts lowering the salt in processed foods in response to public demand for healthier options, he adds.

In the meantime, he says, groups may need to keep up pressure on the food industry to cut down on salt now, to get a head start on lowering blood pressure and improving our health. "We need to work on both the food industry and the public to make this change happen," he says. "The benefits will be enormous." ■



For more information, appointments or consultations, call **+1-443-287-6080**.

CAN YOU GO TOO LOW WITH SALT?

Given the focus on reducing salt intake, should some of us worry about getting too little salt? In short, the answer is it's almost certainly something most of us don't have to be concerned about.

There are, in fact, highly unusual situations where your doctor may caution against overly restricting salt intake. Gordon Tomaselli, M.D., chief of cardiology at Johns Hopkins, notes that certain relatively rare forms of kidney or hormone-related disease may result in the body losing its ability to retain sodium, which means keeping intake of sodium up can be important.

In addition, people who suffer from fainting spells related to low blood pressure might benefit by not letting sodium intake drop too much. And certain rarely prescribed medications, including some corticosteroid replacement therapies, may result in sodium loss that calls for going easy on salt cutbacks.

But Tomaselli emphasizes that few people need to concern themselves with these unusual situations, assuming their doctors haven't said something specifically about keeping sodium intake up. "The overwhelming majority of people would do well to reduce their salt intake," Tomaselli says. "Eating the type of diet we do, it's nearly impossible to take in too little."

And he adds that, of course, the best way to deal with any questions or concerns about salt intake is to talk to your doctor.

Finding the Right Answers

Marvin Leventer was told he would die from liver cancer in five years. But after seeking an opinion at Johns Hopkins, a lifesaving discovery determined the original diagnosis was dead wrong

LIVER TUMOR TRUTHS

- ▶ Many types of cancer can spread to the liver, including pancreatic, colorectal and breast cancers, as well as neuroendocrine tumors.
- ▶ Not all liver tumors are cancerous, but even benign tumors may need treatment.
- ▶ If enough of the liver is left behind, the rest will grow to compensate for what was removed.

I'm a healthy, active person, so when I started having abdominal pain I figured it would just go away on its own. But the pain was intense at times and eventually I thought I'd better see a doctor.

The first doctors found a mass on my liver and, after a biopsy, told me I had liver cancer. I went for a second opinion and, based on the same information, they explained my treatment options; they basically said I'd be dead in five years.

That's when I decided to get a third opinion. I went to Johns Hopkins, where I met Dr. Timothy Pawlik, director of the Hepatobiliary Surgery Program.

He did an MRI and some blood work and said that even though the mass on my liver was pretty large, I just didn't fit the profile for liver cancer. Dr. Pawlik ran a bunch of other tests, and when he had all the information he needed, he told me that what the pathologists at Johns Hopkins saw wasn't what the doctors at the other hospitals saw.

It turns out the primary tumor was on my pancreas—not in my liver—and the kind of pancreatic cancer I had was slow-growing. That meant I needed surgery, but not chemo or radiation.

Because so much of my liver was affected by the tumor that spread from the pancreas, they did two surgeries. During the first one, they removed half my liver. The second surgery a month later took care of the cancer in my pancreas.

It's four years later and I'm still doing great. I've since done two Ironman distance triathlons, and I am here to be with my wife and two daughters. Dr. Pawlik and the team at Johns Hopkins took a nasty situation and completely turned it around. ■



To watch a video of Marvin Leventer telling his story, visit hopkinsmedicine.org/mystory. For more information, appointments or consultations, call +1-443-287-6080.

Centralized Expertise

Early diagnosis and coordinated care make all the difference in lung cancer treatment

**FREE
ONLINE SEMINAR**
LUNG CANCER:
*Serious Treatment
for a Serious Cancer*

Tuesday, February 28, 7–8 p.m. EST

Lung cancer is frequently detected when the disease has progressed, making it a frightening diagnosis for patients. Join Johns Hopkins oncologist Russell Hales, M.D., in a discussion of screening, diagnosis, staging and treatment for different kinds of lung cancer. To register, visit

[hopkinsmedicine.org/
intlseminars](http://hopkinsmedicine.org/intlseminars).

Lung cancer is one of the most commonly diagnosed yet deadliest forms of cancer. The challenge is that the disease often isn't detected as early as it could be. Then, determining and implementing the best combination and order of treatment—chemotherapy, radiation, surgery—can sometimes be a slow process.

That's not the case at a comprehensive cancer center like Johns Hopkins, where a team of lung cancer specialists coordinates care. Each patient receives an accurate diagnosis and an innovative combination of therapies and treatments quickly, which can improve results.

A key component of the center is a one-day clinic that gives patients newly diagnosed with lung cancer access to every related specialist they need.

"Instead of hopping from one clinic to another over a week or two, patients will get everything done in 24 hours," says Russell Hales, M.D., a radiation oncologist and clinical director of the clinic.

Patients receive all the necessary tests to complete the staging of their tumor, along

with a complete medical assessment. They also learn about their condition, how to stay healthy during treatment and opportunities to participate in clinical trials.

A team of about 15

specialists reviews each case and comes to a united decision about the best path forward for each patient. The multidisciplinary team includes thoracic surgeons, medical and radiation oncologists, interventional pulmonologists, nurses and social workers.

"These are highly specialized experts working together on each patient's care," Hales says.

The center also offers screenings for people at high risk of developing lung cancer. A recent study showed that computed tomography (CT) scans can better detect lung cancer. These screenings are appropriate for people ages 55 to 74 who have smoked the equivalent of a pack of cigarettes a day for 30 years. Hales says the decision to have the screening should be made in consultation with a specialist. ■



For more information, appointments or consultations, call **+1-443-287-6080**.

LUNG CANCER FACTS AND RISK FACTORS

- ▶ Lung cancer is the most common cancer worldwide, with 1.6 million people newly diagnosed each year, according to 2008 data from the World Health Organization.
- ▶ Although some lung cancers develop in people without any clear risk factors, smoking is the leading cause of lung cancer. A majority of lung cancer deaths occur in smokers.
- ▶ Quitting smoking is the best thing you can do to lower your risk of lung cancer; along with avoiding secondhand smoke.
- ▶ Radon and certain chemicals can cause lung cancer; so it's smart to test your home for radon and avoid cancer-causing chemicals—or at least protect yourself against them if you're exposed at work.
- ▶ There is some evidence that a healthy diet that is high in fruits and vegetables may help prevent lung cancer.

WE'RE HERE FOR YOU

JOHNS HOPKINS MEDICINE INTERNATIONAL coordinates the highest-quality care for thousands of patients from more than 100 countries, so we understand and anticipate your cultural expectations. Our caring, knowledgeable staff will be there to assist you during all phases of your medical visit, tailoring each step to your individual needs.

Before Your Visit

- Appointment scheduling
- Financial counseling
- Accommodation arrangements
- Ground transportation

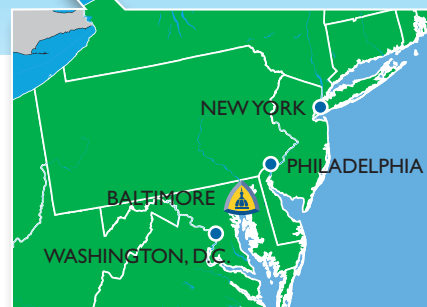
During Your Treatment

- Personal escort to medical appointments
- 24/7 language interpretation
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- Equipment and/or home care arrangements (if needed)
- Private duty nurse arrangements (if needed)
- Follow-up appointment(s) scheduling
- Concierge services for dining and entertainment
- International newspapers and Internet access
- Relaxing, hospitable executive lounge



After Your Departure

- Assistance with medical records
- Assistance with prescriptions
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