Pushing Surgical Boundaries

Instead of seeing obstacles, Johns Hopkins surgeons see opportunities for extending lives.
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Meet doctors who think beyond conventional wisdom to find new and innovative treatment solutions.

Getting the Right Referrals for Your Kids

PEDIATRICIANS SCORE HIGH on screening kids for developmental delays but fall short when it comes to referring them for further evaluation or treatment.

That’s according to a Johns Hopkins Children’s Center study published in Pediatrics earlier this year.

“We found that many pediatricians didn’t act properly even when serious red flags were present,” says pediatrician Tracy King, M.D., M.P.H. Because the ultimate goal of screening is to improve results for kids with developmental delays, more attention now needs to be given to getting them connected to needed services, King notes.

The study also showed that referrals work best when the pediatrician’s office places them, instead of handing parents a phone number to make appointments and follow up on their own.


Average number of calories in a half-cup, the recommended serving size, of regular vanilla ice cream.
**Vitamin D May Be Good for Your Heart**

Much has been reported about the effect of vitamin D on your health—including that some of the good news is overhyped. But we do know, says cardiologist Erin Michos, M.D., that low vitamin D is an independent risk factor for cardiovascular disease.

“Several studies have shown this,” Michos says. “Even after accounting for other risk factors.”

What we don’t know, she adds, is whether getting your daily requirement—or more—of vitamin D may actually prevent cardiovascular disease. Clinical trials are happening right now to try to figure that out. What they reveal may point to a potential target for cardiovascular disease prevention.

In the meantime, there’s no harm in supplementing your vitamin D. How much do you need? Women, older people and those who are obese and overweight are more likely to be deficient, Michos says.

Generally, 1,000 to 2,000 international units (IU) are considered safe and adequate. And, although no one recommends overexposure to sunlight, as little as 10 minutes can give you 3,000 IU of vitamin D.

“You want to be sensible, of course,” Michos says. “If you don’t get outdoors much, you should take the supplement.”

Check out other recent heart health news from Johns Hopkins at hopkinsmedicine.org/heart.

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**EXERCISING AFTER 50? Don’t Skip a Beat**

IF YOUR HEART SKIPS A BEAT or feels as if it’s racing during exercise, you might be inclined to rush to the doctor’s office, where you could be subjected to extensive testing and exercise restrictions.

But researchers at Johns Hopkins say that if you’re older than 50 and otherwise healthy, those types of irregular heartbeats, or arrhythmias, aren’t necessarily anything to worry about. If you’re a healthy adult without heart disease or other health conditions, you shouldn’t be concerned with moments of rapid heartbeats and palpitations during exercise, says cardiologist Joseph Marine, M.D.

“You should always check your exercise regimen and any heart symptoms with your doctor,” Marine says. “But our study indicates that such episodes during exercise may be part of age-related changes in the heart.”

Looking for a cardiologist near you? Visit hopkinsmedicine.org/doctors.

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**An Itchy Situation**

Ever get the sort of itch that just can’t be scratched away? Plenty of people do. About one-third of those itches are allergy related and treatable with antihistamines. The rest are nonallergic, and relief is elusive.

But Johns Hopkins researchers may have hit on a molecular basis for nonallergic itches involving a family of proteins that function as itch receptors. That could mean hope for treatment beyond scratching or ineffective drugs.

“The majority of itch is not associated with histamine, which means antihistamines won’t work,” says Xinzhong Dong, Ph.D. “We’re not saying our discovery solves all other itch, but it does make significant strides in getting to the root of a sensation that’s poorly understood.”

Stay up to date on this study and other research at Johns Hopkins. Follow us on Twitter: @HopkinsMedNews.

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**ABCs OF PREVENTING CARDIOVASCULAR DISEASE**

Learn more from Johns Hopkins experts about lifestyle choices that can help prevent cardiovascular disease.

Visit hopkinsmedicine.org/healthseminars/videos.

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**SAVE THE DATE**

**WOMEN’S HEALTH CONFERENCE**

Mark your calendar for A Woman’s Journey on Nov. 20 at the Baltimore Hilton Hotel. For more information, call 410-955-8660 or visit hopkinsmedicine.org/awomansjourney.

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Burn Notice

Summertime, and the living is easy. But watch out for burn hazards, especially when it comes to your kids.

Q What should I know about kids and sunburn?

Babies who are less than a year old should be kept out of direct sunlight. Period. They can’t tell you they’re too hot or it’s too bright. They’re not born with a developed skin protection system either, so they burn more quickly and easily. Also, young children have more skin relative to their overall body mass than adults do. That means if they do get a sunburn, it will be more serious than a similar-sized burn in an adult.

Q What are the most common burn injuries during the summer?

Burn hazards are around us year-round, says Johns Hopkins pediatric burn unit physician Dylan Stewart, M.D. But there are particular threats that include sun exposure, campfires, grills and fireworks. Though burn injuries don’t discriminate, kids are moving targets and can be more susceptible to the risks. Interestingly, the most common burn injury during the summer is also the most common all year long: That’s hot water in the home, usually in the bathtub and especially with smaller children who aren’t being properly supervised.

Q What’s the best advice for avoiding summer burns?

Parents, guardians and caregivers of small children should understand the hazards and know how to respond. Keep your smallest, least-mobile kids out of the sun. Make sure the water temperature in your home is no more than 120 degrees. Teach your kids about the potential dangers of grills and campfires. And make sure they know the essential “stop, drop and roll” rule: If they’ve caught fire, they should literally stop, drop and roll on the ground to extinguish the flames.

Q I’ve heard I should put butter on a serious burn. Is that true?

No, absolutely not. The best immediate action for burns is to remove clothing from the burned area and treat with cool water or compresses. Don’t use ice, as this can actually cause frostbite and injury to the surrounding tissue. If the burn is more than the size of your child’s palm, or it’s on the hands, feet, face or genitalia, you should go immediately to a hospital. In the case of sunburn, you shouldn’t apply salves such as butter or petroleum jelly—those will just make the symptoms worse. Cool compresses work here, too. You should contact your doctor if your infant has been sunburned or your child’s sunburn is accompanied by high fever, blisters or severe pain.

Protect your children from burn injuries with advice from Johns Hopkins experts. For appointments, call 877-546-1872 or visit hopkinschildrens.org.
It’s 10 p.m. and you’re cross-legged on your bed with your laptop on your knees, maybe your cell phone by your side and perhaps even your television on for company. Sound familiar? With all of that stimulation, it’s no wonder Americans are getting less sleep over time. But the culprit isn’t the devices on their own; rather, it’s the light they emit that’s helping to disrupt our sleep.

“Part of the problem is exposure to light in the evening,” says sleep specialist David Neubauer, M.D. Possibly more problematic, he adds, is the type of light to which we’re exposed. The effect of light is strongest in the blue light range. It’s the most potent part of the spectrum, with the capacity to keep us alert and stimulated. It’s also the type of light that shines on through computer monitors, televisions and cell phone screens.

As a culture, we’ve already been staying awake longer for years. Now, with more devices emitting more blue light later at night, we’re creeping into sleeplessness.

“There really aren’t sleep experts everywhere,” says Nancy Collop, M.D., head of Johns Hopkins’ sleep disorders program. That’s too bad, because lack of adequate sleep adds up.

Short-term consequences affect our memory and cognitive ability and double the risk of an occupational injury. Long term, sleep deprivation can lead to high blood pressure, heart problems, stroke, obesity, depression and other mood disorders.

“We really need to get to a place where our culture values sleep,” Neubauer says. The first step may be as easy as shutting down the glowing blue screens at bedtime and keeping them out of our bedrooms.

**Tune In To Your Body**

Two different, but related, mechanisms decide when we sleep:

- **Homeostatic drive**—Basically, the longer you go without sleep, the more tired you become until sleep ultimately wins out.

- **Circadian rhythm**—Our 24-hour cycle of biochemical, physiological and behavioral processes, which is reinforced by exposure to light and other stimuli.
Instead of seeing obstacles, Johns Hopkins surgeons see opportunities for extending lives

FISHER HOWE isn’t your average surgery patient.

In 1988, he underwent a multivessel open-heart bypass procedure. When those bypasses started giving out 20 years later, as is often the case, he was hospitalized twice, emerging with two stents to help restore the lost blood flow to his heart.

But, to Howe’s dismay, he found that he still couldn’t walk across a room without gasping for breath, and physicians near his home said they were running out of options.

For Howe, an avid tennis player who’d placed third in his U.S. age group just before his bypasses began to fail, and a career diplomat who’d rarely slowed his pace, the situation was unacceptable.

Howe’s biggest challenge, however, wasn’t not knowing what to do next; it was getting someone to do it. Even with his otherwise good

Johns Hopkins doctors are continually looking for ways to improve modern surgery. Go to hopkinsmedicine.org/surgery. To find a surgeon, visit hopkinsmedicine.org/doctors.

SURGICAL Pushing
health, one thing held his physicians back from taking the next logical step: Howe was 94 years old. His doctors at the time thought it was obvious that he couldn’t undergo a heart operation. Instead, they advised him to just settle for a shorter life.

Johns Hopkins cardiac surgeon Duke Cameron, M.D., disagreed. When Cameron looked at Howe’s dangerously narrowed aortic valve, he also took in the remarkable character of an individual with an uncommon zeal for life. “I think you’ve got the stuff to do it,” Cameron said.

Cameron performed the operation, and today Howe is back to exercising daily on the rower, treadmill and elliptical.

Questioning Status Quo
For the men and women who populate Johns Hopkins’ Department of Surgery, thinking beyond conventional wisdom is the conventional wisdom. It’s an outlook that has been ingrained from the get-go, when Johns Hopkins’ first surgeon-in-chief, William Halsted, M.D., laid the foundation for surgery in the U.S. as we know it.

Halsted not only revolutionized surgery by insisting on skill and technique, but he also pioneered the first lifesaving surgical treatment for breast cancer. He developed new operations for intestinal and stomach surgeries, gallstone removal, hernia repair and disorders of the thyroid gland.

Those following in Halsted’s footsteps at Johns Hopkins launched the specialty of neurosurgery, proved that operating on the heart was even possible, became the first to separate twins joined at the head and implanted the first defibrillator in a human heart.

The list rolls on. At Johns Hopkins, the word can’t is replaced by let’s see about that.

Redefining Eligibility
Howe may not be the most typical of Cameron’s heart-surgery patients, but he certainly proves that cases shouldn’t be judged by a rule book.

“As our population ages,” Cameron says, “we’re seeing more patients with problems like age-related aortic stenosis that require surgery.” Many of those patients who are being rejected elsewhere because of age are reconsidered at Johns Hopkins. And it’s not just for heart surgery.

When thoracic surgeon Stephen Yang, M.D., came to Johns Hopkins 13 years ago, he took it as an article of faith that patients older than 65 made poor candidates for surgery. Now, a rising tide of seniors considered to be ineligible for surgery somewhere else are finding their way to Yang’s office—and getting very different answers. “More people are staying healthier longer, and many are defying their biological age,” Yang says. “We consider patients on their merits.”

Improving Quality of Life
The age barrier can work the other way, too. While many surgeons shy away from the complexities of surgery for people who are past a certain age, others won’t operate until you reach a certain age.

Orthopedic surgeon Simon Mears, M.D., sees it a lot. With joint replacements, he explains, surgeons worry about components wearing down and patients having to face other operations down the road. “The younger the patient, the more likely that is to be the thinking,” he says.

But today’s artificial joints have improved significantly, he adds. Even more important, there’s a quality-of-life issue that’s hard to ignore. Take one of Mears’ patients, a 29-year-old who needed both hips replaced. Other surgeons
Tiny Hearts Get Another Chance

Until recently, a physician faced double jeopardy treating an infant in need of a heart transplant. There were risks associated with the procedure itself, plus a 40 percent chance the baby wouldn’t survive the wait for a compatible donor heart.

To today, those odds are much improved, says pediatric heart surgeon Luca Vricella, M.D. Vricella has shown that infants up to 14 months old can accept a donor heart of a different blood type without an increased risk of rejection.

“It still requires special precautions,” Vricella explains. “But this means we can reduce by up to 20 percent the number of children who die waiting for a matching donor heart.”


Let’s Go to the Replay

There was a time when surgically curing a man of prostate cancer also guaranteed that he’d be impotent. Then, 28 years ago, Johns Hopkins urologist Patrick Walsh, M.D., developed a way to remove a cancerous prostate but spare as much as possible the bundles of delicate nerves on either side that are responsible for erection.

Today, that operation is considered the gold-standard treatment for cancer confined to the prostate.

Yet Walsh never rested on laurels. To figure out why one man he operated on would have a perfect result immediately while another one’s result might be delayed, Walsh began videotaping his operations, then spent hours scrutinizing them.

Among his discoveries was that some men have a slight variation in the location of those all-important nerve bundles. As a result, he says, “if you don’t realize it, you could go where you think everything is safe, and it really isn’t.”

When Walsh first started using the video camera, some of his patients asked if he was afraid of being sued. “My answer was no,” he says. “It wasn’t that I did something wrong; it was that sometimes I did something better. And I wanted to know what that was. On the videotape, you can see the entire field, the secondary consequences in what your fingertips may be doing, things you never saw before. It really was a revelation.”

Not Settling for No

Age—at either end of the spectrum—is far from the only limit that Johns Hopkins surgeons regularly question. Sometimes, they say, solving a surgical problem means refusing to accept that the standard approach equals the best approach. It’s a mantra that Colorado radiologist Michael Fox came to appreciate after his hometown doctors found a benign lesion on his pancreas.

Fox was continually told that the only way to deal with the growth was to have an operation called the Whipple procedure.

But the Whipple, ordinarily used for people who have pancreatic cancer, removes part of the pancreas as well as the gallbladder, the common bile duct and part of the small intestine. To Fox, that seemed like overkill.

By doing a little research on his own, Fox discovered that Johns Hopkins pancreatic surgeon Dana Andersen, M.D., had developed a technique for these kinds of noncancerous lesions that leaves most of the pancreas intact and doesn’t affect the other organs.

“Why go for the most aggressive if you don’t have to?” Fox says. “Often there’s another path. People need to know that.”

Watch and listen to more surgery success stories from physicians and patients. Plus, get the latest videos, podcasts and medical news. Subscribe to our online communities: Facebook.com (search Johns Hopkins Medicine) and YouTube.com/johnshopkinsmedicine.
Defying the Odds

Sally Rotondo is basically cured eight years after a terminal lung cancer diagnosis

I thought I had allergies. It was just a small cough that wouldn’t go away. My doctor did a chest X-ray, found a spot he thought was pneumonia and prescribed antibiotics.

Eight weeks later, after a follow-up CT scan and then a biopsy because the spot was still there, I was diagnosed with lung cancer. I was 47 and terminal. When I told my husband, he cried. I said we had one day to cry, and then we needed to walk the road.

Johns Hopkins was almost literally in my backyard. I knew if anyone could help, it would be them. I was fortunate that I didn’t have any other health problems. That meant I qualified for surgery—an upper lobectomy on my right lung. I was stage 3, which is bad—only 17 percent who undergo surgery actually survive more than five years.

It’s been nearly eight years, and I’m basically cured.

What struck me about the doctors at Johns Hopkins who treated me was that they’re on a different playing field than the rest of us—intense, laser-focused, relentless. And, they and the nursing staff provided me with a wonderful support system.

When I walk in there today, I think, I’m safe here.

For more information on surgery for lung cancer, or to make an appointment, call 877-546-1872 or visit hopkinsmedicine.org/surgery.
IT IS ESTIMATED that about 18 million men older than 20 have erectile dysfunction, which means there are millions of women who probably also struggle with this common condition in their partners.

“It affects both,” says urologist Arthur Burnett, M.D. “What we’ve learned, though, is that women can play a key role in the recognition and successful treatment of ED.”

Much of that success is tied to open communication: identifying the problem, understanding what’s causing it—and what’s not—learning what treatments are available and determining which ones work best for both partners.

“The first step is certainly opening up about it,” Burnett says. “And then it’s important to understand that there’s a physiological reason for ED.”

In the past, people thought ED was solely an emotional issue. But the roots of the dysfunction are more complicated than that. It can be a warning sign of another condition, including cardiovascular disease, or related to health problems such as diabetes, kidney disease or high blood pressure. ED can also be a side effect of some medications.

“What happens, though, is that when a man has ED, he may experience psychological issues such as anxiety or depression,” Burnett says. On the other side, many women—especially older women—may take it personally and believe they’re part of the problem.

Women who understand more about the underlying reasons for ED and who can encourage their partners to talk about it make the chances for successful treatment much greater. More important, they may also be key to identifying a more serious medical condition.

“That’s the next step—getting an evaluation to discover what’s causing it and then moving toward treatment,” Burnett says. Oral medications don’t work for everyone, and doctors will try lifestyle changes or other therapies first.

Eventually, medication may be prescribed or other options explored—including devices, injections or surgery. It comes down to both partners being active in the treatment process so that they are comfortable with their decisions.

“Women have a valuable role in making that happen,” Burnett says.

Talking about erectile dysfunction is a good first step toward treatment. To learn about ED and other urological conditions, visit hopkinsmedicine.org/urology. Or call 877-546-1872 for appointments and consultations.
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- Know what to bring and what to expect

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