

Health

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THE CONSUMER

How to Steer Toward the Path of Least Treatment

By RONI CARYN RABIN

The first doctor Lynn Munroe consulted about her hyperactive thyroid gland recommended radioactive iodine treatment to destroy the gland, followed by a lifelong regimen of thyroid hormone replacement pills.

The second physician she consulted said that he could operate, removing the gland without radiation, but that she would still need to take the pills.

A third doctor suggested a more cautious approach, prescribing medication to depress the gland's activity. It worked: Ms. Munroe, 49, a publicist in West Nyack, N.Y., no longer has symptoms of hyperthyroidism, even though she has been weaned off the medication.

"And I still have my thyroid intact," she said. "Thank God for third opinions."

Has American health care become overly aggressive? Many primary care doctors think so, according to a survey published last week in Archives of Internal Medicine. More than 40 percent of 627 primary care doctors who responded to the survey thought their own patients were overtreated; only 6 percent thought the patients received too little care.

Why so many tests and referrals? Limited time to spend with patients, fear of being sued and financial incentives to do more were among the reasons cited by the physicians.

Patients often worry about the cost of overtreatment but fail to recognize the potential harm of undergoing too many tests and procedures, said Dr. Brenda Sirovich, lead author of the study and a faculty member of the outcomes group at the Veterans Affairs Medical Center in White River Junction, Vt.

"I think we don't talk with patients enough about the fact that there is an optimum amount of medical care, and when you start giving too much, there's definitely a risk that it's going to be harmful," Dr. Sirovich said.

In Ms. Munroe's case, all three of the options presented to her are appropriate treatments for a hyperactive thyroid, and all have pros and cons. But despite its invasiveness, irradiation is



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more commonly used than medication to suppress production of thyroid hormone. Irradiation is considered the definitive treatment; it is also more lucrative.

Dr. Rita Redberg, editor of Archives of Internal Medicine, a journal that has been publishing a series of papers on overtreatment, said the trend in medicine has been toward running more diagnostic tests and using more invasive procedures, even when tests may not be called for and equally effective, less invasive treatment alternatives may be less risky and less costly.

"Why is the most aggressive treatment becoming the standard of care?" Dr. Redberg asked in a telephone interview. "We know that when patients are given a choice between surgery and a medical treatment, they almost always opt for the least invasive, least aggressive treatment."

Dr. Redberg and other experts have also been critical of what they see as the overuse of medication, including the in-

creased use of opioids for chronic pain; the long-term use of proton pump inhibitors, linked to severe magnesium deficiency and other side effects, to manage acid reflux disease; and the widespread prescription of statins for patients without coronary artery disease, despite well-known adverse effects of the drugs.

In one study published in the journal, doctors who reviewed the charts of elderly patients were able to discontinue nearly half of their medications without any detriment to the patients.

But the idea that less is more is controversial, especially when it comes to heart disease. Many cardiologists say that cholesterol-lowering statins, for instance, can save healthy patients with risk factors from developing heart disease in the future.

"If you don't interrupt the atherosclerotic process, it builds up over decades," said Dr. Roger S. Blumenthal, director of the Ciccarone Center for the Prevention of Heart Disease at Johns Hopkins.

Study Cites Increase In Cancers From HPV

By DENISE GRADY

Throat cancers caused by a virus transmitted during oral sex have increased significantly in the United States in recent years, researchers reported on Monday.

The virus is the same one that causes many cases of cervical cancer: human papillomavirus (HPV) Type 16.

Researchers tested tumor samples from 271 patients with certain types of throat cancer diagnosed from 1984 to 2004. The virus was found in only 16 percent of the samples from the 1980s — but in 72 percent of those collected after 2000.

The researchers estimated that over all, throat cancers caused by the virus have increased to 2.6 per 100,000 people in 2004 from 0.8 cases per 100,000 people in 1988. If the trend continues, by 2020 the virus will be causing more throat cancer than cervical cancer, the study concluded.

Doctors in the United States and other countries had already noticed increases in throat cancers caused by HPV, but the extent was unclear.

"This is the first definitive evidence that these changes at the population level are indeed caused by HPV infection," said Dr. Maura L. Gillison, the senior author of the new study and the chairwoman of cancer research at Ohio State University.

The research is published in The Journal of Clinical Oncology.

Dr. Kevin J. Cullen, director of the Greenebaum Cancer Center at the University of Maryland, said the study was well done. "It's very clear that this is becoming a major epidemic," he added.

He said his own research team had found similar increases in

Hoping to Crack Alzheimer's, Together as a Family

By PAM BELLUCK and SALVADOR RODRIGUEZ

For the Betancur family, it was a kind of pilgrimage, an act of faith in science.

In September, four family members traveled from Medellín, Colombia, to the Banner Alzheimer's Institute in Phoenix, along with eight distant relatives. There are many more where they came from, about 5,000 — all members of the largest extended family linked to an inherited form of Alzheimer's disease.

"There's no words to describe seeing a loved one decay to the point where you no longer recognize them," said Blanca Nelly Betancur, 43, whose mother and, so far, three siblings have inherited the disease. "To see them as a cadaver."

Banner's researchers and a Colombian neurologist are studying the extended family, planning a clinical trial to determine whether Alzheimer's can be prevented by giving drug treatment years before dementia begins.

The Colombian relatives are considered ideal for testing preventive treatments, because scientists can tell which family members will develop Alzheimer's and approximately when. Those getting the disease carry a genetic mutation causing memory loss in their early to mid-40s and often loss of most cognitive functions by their early 50s.

The trial is not expected to begin until 2012 because researchers are applying for federal financing and have not yet decided which drug to test. Testing will occur in the region where most relatives live, Antioquia, which includes Medellín and many isolated mountain villages.

But last month, 12 relatives visited Phoenix so scientists could conduct PET scans that can show whether their brains have the characteristic amyloid plaques of Alzheimer's disease. Altogether, these scans will be performed on 50 family members this fall, some with Alzheimer's already, some with the mutation that will cause it, and some who have no mutation and will not get the disease.

The snapshots of amyloid in family members with and without the gene, and with and without symptoms, will help focus the drug-testing study so researchers can better understand whether



JOSHUA LOTT FOR THE NEW YORK TIMES

AWAY FROM HOME Natalia Agudelo, who traveled to Phoenix from Colombia, belongs to a family linked to an inherited form of Alzheimer's disease.

er the drug is staving off Alzheimer's, said Dr. Eric Reiman, the Banner Institute's executive director.

"We need to find out when these amyloid plaques accumulate, how advanced they are by the time they enter the prevention trial," Dr. Reiman said. "This information will provide a foundation for

Colombian relatives are considered ideal for testing treatments.

knowing how much these brain changes have occurred roughly at the time people at their age will enroll in the trial."

The drug trial will test a treatment that attacks amyloid, most likely a drug already tried unsuccessfully in people with Alzheimer's symptoms. Many scientists now believe it is possible that drugs have failed so far because once symptoms begin, the brain is already badly damaged.

Initially, the project plans to enroll 100

relatives with the mutation who will receive the drug, plus 100 mutation carriers and 100 noncarriers who will receive a placebo. Participants will not be told whether they have the mutation or are receiving the drug.

Ms. Betancur's family is in an especially difficult position because she married a distant cousin, Carlos Alberto Villegas, and the mutation runs in both sides of the extended family. Her mother, who was living with them, died last year of Alzheimer's; a sister with early symptoms now lives with them, too. Mr. Villegas, 54, once a vibrant livestock trader, has Alzheimer's that is progressing so rapidly that in just the last year he has lost all ability to speak and walk.

"Psychologically it's very tough," said their daughter Natalia Agudelo, 24, who also traveled to Phoenix.

"After they lose memory, what remains are their instincts like animals," she said, adding that her father can still chew and make other instinctive movements. "Until his last moment, we'll be there seeing what more we can do to help, what more we can do to love."

Natalia and her younger brother and

sister may have inherited the mutation from their father or, if their mother is a carrier, from her as well. As a result, Natalia has decided not to have children.

"I love babies, and I'd be so happy with children, but having a child isn't just 'Oh, how cute,'" she said. "You have to be realistic and be clear that the disease is very tough. They say in Medellín, 'Don't go spreading the Alzheimer's around.'"

Joining them in Phoenix were the elder Ms. Betancur's brother, William, 50, and her sister Estela, 46, both with symptoms.

William, who quit his job as a bus driver because he could not remember the stops, knows he is losing his mind. He is so enthusiastic about the research that when asked into which arm he preferred the intravenous tube, he said, "Anywhere! With William, you guys have no problems at all!"

But Alzheimer's makes him frustrated, irritable and "sad that my kids might eventually get the disease," said William, who had a vasectomy after his third child because of that risk. "I would almost prefer that I not have grandchildren. Or at least only a few."

When the relatives picked up their passports for the Phoenix trip, William got lost for an hour in the government building. He has no memory of the huge celebration his family threw in May for his 50th birthday. Asked his age, he still thinks he is 49.

"What's the point of doing these things for him if he doesn't even remember?" asked his wife, Elida Castrillón.

"Because he feels the love," Natalia said.

Estela said she had not been told if she has Alzheimer's, but believes she does, "because I begin to forget things."

She cries often and is lonely because her husband is estranged, and her daughter is busy with work and school. She hopes researchers might find a cure in time to benefit her.

These days, she is halfway through a book called "A Pesar de Todo, Que Linda Es la Vida" — "Despite Everything, Life Is Beautiful."

Really?

THE CLAIM
Yawning cools the brain.

THE FACTS

The medical literature is rife with explanations for yawning, but one has gained substantial ground in recent years: This mysterious habit may help regulate brain temperature.

The brain operates best within a narrow range of temperatures, and like a car engine, it sometimes needs a way to cool down. To lower the brain's thermo-



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stat, researchers say, the body takes in cooler air from its surroundings — prompting deep inhalation.

Yawning is contagious. Simply watching someone do it is enough to in-

duce the behavior. But when scientists had people watch yawning videos in a 2007 study, they found that applying cold packs to the subjects' heads practically eliminated contagious yawning. Nasal breathing, which also promotes brain cooling, had a similar effect.

In a study of 160 people published last month in the journal Frontiers in Evolutionary Neuroscience, yawning was found to vary by season. People were shown to be more likely to yawn in winter than summer, perhaps because an overheated brain gets little relief from taking in air that is warmer than body temperature.

The researchers, who controlled for factors like humidity and the amount of

sleep subjects got the night before, also found that the more time a person spent outside in warm temperatures, the less likely they were to yawn. The findings may explain why people yawn when tired: Sleep deprivation raises brain temperature. As for why yawning is contagious, it may have evolved as a way to signal to others in a group to stay alert and ready in case of outside attacks, scientists say.

THE BOTTOM LINE

Growing evidence suggests yawning may be a way for the brain to cool off, though it is still just a theory.

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A rise in throat cancers that result from oral sex.

throat cancers in Baltimore during the last 30 years. Researchers think the trend may be attributable to increases in oral sex, particularly among younger people who think it is safer than intercourse.

Dr. Gillison said the increase in throat cancers was not a cause for panic because they still are not common. There are fewer than 10,000 cases a year. Most people with HPV do not develop cancer.

The throat tumors it causes, called oropharyngeal cancers, occur in specific areas: the base of the tongue and the area just behind the mouth, including the soft palate, tonsils, and the side and back walls of the throat. Some oropharyngeal cancers are not caused by the virus, but by tobacco and alcohol; their rates have been decreasing as smoking has declined.

Throat cancers caused by HPV are more treatable than those not caused by the virus. Median survival in throat cancer patients with the virus is 131 months; without it, 20 months. Virus-related throat cancers are far more common in men than in women, a difference that has not been explained.

HPV is commonly found in the genital region and is transmitted by intimate contact. Usually the immune system fights off the infection, but in some people the virus persists and causes cancer.

There is no screening test for oropharyngeal cancers, no equivalent of the Pap test used to find precancerous growths on the cervix, Dr. Gillison said. Oropharyngeal cancers generally are not found until symptoms start: lumpy, swollen lymph nodes in the neck, or a lingering sore throat or earache.

Patients may need surgery, radiation or chemotherapy, or some combination of those treatments.

"The side effects can be horrendous," Dr. Gillison said. "It's a very difficult therapy to get through."

Two vaccines, Gardasil and Cervarix, protect against HPV Type 16 and other strains of the virus that cause cancers and genital warts. But medical groups now recommend them only for girls, to protect against cervical cancer.

Researchers think the vaccines might also prevent some throat cancers, but cannot be sure unless the vaccines are specifically tested for that purpose. The manufacturers — Merck and GlaxoSmithKline — say they have no plans to study throat cancers. But Dr. Cullen said that the vaccines were likely to prevent the throat cancers, and should be given to boys too. He said he had no connection to vaccine companies.

Dr. Gillison said the vaccine companies had paid for her research in the past, but had no role in this study, which was paid for by the National Cancer Institute, Ohio State University and the Oral Cancer Foundation.