"All the News That's Fit to Print"

The New York Times

VOL. CLVII .... No. 54,143 © 2007 The New York Times THURSDAY, NOVEMBER 29, 2007 Printed in Ge

Nationa
South: Some clo
Georgia. Mostly
Highs in 60s, bu
nessee and Appa
70 on Gulf Coast.

DOUG MILLS/THE NEW YORK TIMES

The Next Step in Mideast Peace Talks
President Bush, flanked by the Palestinian leader, Mahmoud Abbas, left, and Prime Minister Ehud Olmert of Israel, entering the White House Rose Garden yesterday after their separate talks on putting a "road map" to peace into effect. Page A14.

For Musharraf, Reduced Power As a Civilian

Complications for U.S. in Fighting Terrorists

By CARLOTTA GALL and JANE PERLEZ

ISLAMABAD, Pakistan, Nov. 28 — A day after resigning as army chief, Pervez Musharraf will be sworn in as a civilian president on Thursday, leaving him with vastly reduced powers and Washington with a far more complex Pakistan to deal with in its fight against Al Qaeda and the Taliban.

Bowing reluctantly to pressure at home and abroad, Mr. Musharraf, 64, relinquished his military role in a somber ceremony on Wednesday, ending eight years of military rule. He turned over control of the army to Gen. Ashfaq Parvez Kayani, 55, a former head of Pakistan's premier intelligence agency, Inter-Services Intelligence.

The move sets up the potential of competing power centers in Pakistan, with a new army chief separate from the president and the recent return from exile of the country's two main opposition leaders. That is likely to complicate Bush administration antiterrorism policy here, something officials in Washington were hoping to avoid, and one reason they supported Mr. Musharraf for so long.

Senior army commanders grumbled increasingly in recent months that Mr. Musharraf was so engrossed in his own political survival that he had become distracted from battling the country's spreading insurgency, Western military officials said.

Though finally stepping down as army chief, he is likely to retain much of his old power as a civilian president, fortified by his emergency decree on Nov. 3, and loyalists he chose at the top of the military, according to Pakistani officials and analysts.

But in fairly short order, Mr. Musharraf, who plunged the nation into political turmoil with his emergency decree and has been a sometimes frustrating partner in Washington's fight against terrorism, will become a diminished figure, they said, a civilian president in a country where traditionally the power lies with an elected prime minister, or the military chiefs who have overthrown them. Mr. Musharraf came to power in such a coup.

Though General Kayani is considered loyal to the president, the

Continued on Page A10

LENDERS FLOW OF GROWTH

FED HINTS A

Rapid Decli Intensifies Recessio

By PETER S.

Credit flowing companies is dry not seen in deca the creation of j pansion of busin tensifying worrie omy may be he sion.

The combined leading sources standing comme trial bank loans, loans known as per — peaked at lion in August, a from the Federa mid-November, s down to $3 trillion ly 9 percent.

Not once in the Fed began track bers in 1973 has t nance constricte Smaller declines recessions going other times such to occur in conju economic downtu

Policy makers Reserve are grow ly alarmed abou which is an out woes of the hou gage industries. the Fed's vice ch L. Kohn, said that ket turbulence ap ducing credit to consumers, hintin tral bank, in resp pared to cut inte ther.

Mr. Kohn's une that the Fed woul ible and pragmat ing" that might h trend and shore u spurred a rally that sent stocks Dow Jones indu jumped 331 point while the broade Poor's 500 index percent, to 1,469.02

For now, thoug is looking bleaker nesses. Already, c erything from furn turing to Web si tightening their

Continued or

For Toddlers, Toy of Choice Is Tech Device

By MATT RICHTEL and BRAD STONE

SAN FRANCISCO, Nov. 28 — Cellphones, laptops, digital cameras and MP3 music players are among the hottest gift items this year. For preschoolers.

Toy makers and retailers are filling shelves with new tech devices for children ages 3 and up, and sometimes even down. They say they are catering to junior consumers who want to emulate their parents and are not satisfied with fake gadgets.

Consider the "hottest toys" list on Amazon.com, which includes the Easy Link Internet Launch Pad from Fisher-Price (to help children surf on "preschool-appropriate Web sites") and the Smart Cycle, an exercise bike connected to a video game.

Jim Silver, editor of Toy Wishes magazine and an industry analyst for 24 years, said there had been "a huge jump in the last 12 months" in toys that involve looking at a screen.

"The bigger toy companies don't even call it the toy business anymore," Mr. Silver said. "They're in the family entertainment business and the leisure business. What they're saying is, 'We're vying for kids' leisure time.' "

Technology has been slowly

Continued on Page A23

From Smoking Boom, a Major Killer of Women

By DENISE GRADY

For Jean Rommes, the crisis came five years ago, on a Monday morning when she had planned to go to work but wound up in the hospital, barely able to breathe. She was 59, the president of a small company in Iowa. Although she had quit smoking a decade earlier, 30 years of cigarettes had taken their toll.

After several days in the hospital, she was sent home tethered to an oxygen tank, with a raft of medicines and a warning: "If I didn't do something, life was going to continue to be a pretty scary experience."

Ms. Rommes has chronic obstructive pulmonary disease, or C.O.P.D., a progressive illness that permanently damages the lungs and is usually caused by smoking. Once thought of as an old man's disease, this disorder has become a major killer in women as well, the consequence of a smoking boom in the 1950s, '60s and '70s. The death rate in women nearly tripled from 1980 to 2000, and since 2000, more women than men have died or been hospitalized every year because of the disease.

"Women started smoking in what I call the Virginia Slims era, when they started sponsoring sporting events," said Dr. Barry J. Make, a lung specialist at National Jewish Medical and Research Center in Denver. "It's now just catching up to them."

Chronic obstructive pulmonary disease actually comprises two illnesses: one, emphysema, destroys air sacs deep in the lungs; the other, chronic bronchitis, causes inflammation, congestion and scarring in the airways. The disease kills 120,000 Americans a year, is the fourth leading cause of death and is expected to be third by 2020. About 12 million Americans are known to have it, including many who have long since quit smoking, and studies suggest that 12 million more cases have not been diagnosed. Half the patients are under 65. The disease has left some 900,000 working-age people too sick to work and costs $42 billion a year in medical bills and lost productivity.

"It's the largest uncontrolled epidemic of disease in the United States today," said Dr. James Crapo, a professor at the National Jewish Medical and Research Center.

Experts consider the statistics a national disgrace. They say chronic lung disease is misdiagnosed, neglected, improperly treated and stigmatized as self-induced, with patients made to feel they barely deserve help, because they smoked. The disease is mired in a bog of misconception and prejudice, doctors say. It is commonly mistaken for asthma, especially in women, and treated with the wrong drugs.

Although incurable, it is treatable, but many patients, and some doctors, mistakenly think little can be done for it. As a result, patients miss out on therapies that could help them feel better and possibly live longer. The therapies vary, but may include drugs, exercise programs, oxygen and lung surgery.

Incorrectly treated, many fall

Continued on Page A18

SIX KILLERS: LUNG DISEASE

Chronic obstructive pulmonary disease is often neglected and mistreated.

ONLINE: TRYING TO COPE

One patient's attempt to cope, a Q & A with a leading researcher, and an expert takes readers' questions:

nytimes.com/health

MARCIO JOSE SANCHEZ/ASSOCIATED PRESS

INSIDE

F.C.C. Rule Would Cap The Growth of Comcast

After suffering a setback in his efforts to regulate the cable television industry, the head of the Federal Communications Commission has proposed quick adoption of a rule that would prevent Comcast, the nation's largest cable company, from growing larger. BUSINESS DAY, PAGE C1

Putin Eyes Confidence Vote

The Russian parliamentary election on Sunday is really about President Vladimir V. Putin, who has transformed it into a vote of confidence. PAGE A3

Nixon's Fears on Israeli Arms

A declassified 1969 memoran-

SIX KILLERS: LUNG DISEASE

From the Smoking Boom Comes a Major Killer of Women

From Page A1

needlessly into a cycle of worsening illness and disability, and wind up in the emergency room over and over again with pneumonia and other exacerbations — breathing crises like the one that put Ms. Rommes in the hospital — that might have been averted.

"Patients often come to me with years of being under treated," said Dr. Byron Thomashow, the director of the Center for Chest Disease at NewYork-Presbyterian/Columbia hospital. .

Still others are overtreated for years with steroids like prednisone, which is meant for short-term use and if used too much can thin the bones, weaken muscles and raise the risk of cataracts.

Adequate treatment means drugs, usually inhaled, that open the airways and quell inflammation — preventive medicines that must be used daily, not just in emergencies. It is essential to quit smoking.

Patients also need antibiotics to fight lung infections, vaccines to prevent flu and pneumonia and lessons on special breathing techniques that can help them make the most of their diminished lungs. Some need oxygen, which can help them be more active and prolong life in severe cases. Many need dietary advice: obesity can worsen symptoms, but some with advanced disease lose so much weight that their muscles begin to waste. Some people with emphysema benefit from surgery to remove diseased parts of their lungs.

Above all, patients need exercise, because shortness of breath drives many to become inactive, and they become increasingly weak, homebound, disabled and depressed. Many could benefit from therapy programs called pulmonary rehabilitation, which combine exercise with education about the disease, drugs and nutrition, but the programs are not available in all parts of the country, and insurance coverage for them varies.

"I have a complicated, severe group of patients, but I will swear to you that very few wind up in hospitals," Dr. Thomashow said. "I treat aggressively. I use the medicines, I exercise all of them. You can make a difference here. This is an example of how we're undertreating this entire disease."

Little-Known Epidemic

Researchers say there is so little public awareness of how common and serious C.O.P.D. is that the O might as well stand for "obscure" or "overlooked."

The disease may not be well known, but people who have it are a familiar sight. They are the ones who cannot climb half a flight of stairs without getting winded, who have a perpetual smoker's cough or wheeze, who need oxygen to walk down the block or push a cart through the supermarket. Some grow too weak and short of breath to leave the house. The flu or even a cold can put them in the hospital. In advanced stages, the lung disease can lead to heart failure.

"This is a disease where people eventually fade away because they can no longer cope with life," said Grace Anne Dorney Koppel, who has chronic lung disease. (Ms. Dorney Koppel, a lawyer, is married to Ted Koppel.) "My God, if you don't have breath, you don't have anything."

Most cases, about 85 percent, are caused by smoking, and symptoms usually start after age 40, in people who have smoked a pack a day for 10 years or more. In the United States, 45 million people smoke, 21 percent of adults. Only about 20 percent of smokers develop chronic lung disease.

The illness is not the same as asthma, but some patients have asthma along with their other lung problems. Most have a combination of emphysema and chronic bronchitis. In about one-sixth of cases, emphysema is the main problem. Women are far more likely than men to develop chronic bronchitis, and are less prone to emphysema. Some studies have suggested that women's lungs are more sensitive than men's to the toxins in smoke.

Worldwide, these lung diseases kill 2.5 million people a year. An article in September in The Lancet, a medical journal, said that "if every smoker in the world were to stop smoking today, the rates of C.O.P.D. would probably continue to increase for the next 20 years." The reason is that although quitting slows the disease, it can develop later.

Cigarettes are the major cause worldwide, but other sources are important in developing countries, especially smoke from indoor fires that burn wood, coal, straw or dung for heating and cooking. Women and children are most likely to be exposed. Outdoor air pollution plays less of a part: it can aggravate existing disease, but is believed to cause only 1 percent of cases in rich countries and 2 percent in poorer ones. Occupational exposures in cotton mills and mines may contribute.

Researchers have differed about whether passive smoking plays a role, but a Lancet article in September predicted that in China, among the 240 million people who are now over 50, 1.9 million who never smoked will die from chronic lung disease — just from exposure to other people's smoke.

Many patients with lung disease have other illnesses as well, like heart disease, acid reflux, hypertension, high cholesterol, sinus problems or diabetes. Compared with other smokers, those with C.O.P.D. are more likely to develop lung cancer as well. Researchers suspect that all the ailments stem partly from the same underlying condition, widespread inflammation, a reaction by the immune system that can affect blood vessels, organs and tissues all over the body.

Lung disease can creep up insidiously, because human beings have lung power to spare. Millions of airways, with enough surface area to cover a tennis court, provide so much reserve that most people would not notice it if they lost the use of a third or even half of a lung. But all that extra capacity can hide an impending disaster.

"If it comes on gradually, the body can adjust," said Dr. Neil Schachter, a lung specialist and professor at Mount Sinai Medical Center in New York. "Some of these patients are at oxygen levels where you and I would be gasping for breath."

People adjust psychologically as well, cutting back their activities, deciding perhaps that they just do not enjoy sports anymore, that they are getting older, gaining weight or a bit out of shape. But at some point the body can no longer compensate, and denial does not work anymore.

"It's like trying to breathe through a straw," Dr. Schachter said. "It's very uncomfortable."

By then, half a lung might be ruined. On a CT scan, he said, the lungs may look "moth-eaten," full of holes where tissue has been destroyed.

Often, the diagnosis is not made until the disease is advanced. Even though breathing tests are easy to perform and recommended for high-risk patients like former and current smokers, many doctors do not bother. People who do get a diagnosis frequently are not taught how to use the inhalers that are the mainstay of treatment. Access to pulmonary rehabilitation is limited because Medicare has left coverage decisions to the states. Some programs have shut down, and there are bills in the House and Senate that would require pulmonary rehabilitation to be covered by Medicare. Medicare may also reduce coverage for home oxygen.

Meanwhile, billions are spent on treating exacerbations, episodes of severe breathing trouble that are often caused by colds, flu or other respiratory infections.

A recent study of 1,600 consecutive hospitalizations for chronic lung disease in five New York hospitals found that once patients were in the hospital, their treatment was generally correct, Dr. Thomashow said. But "most upsetting," he said, was that the majority had been incorrectly treated before going to the hospital.

For many, trying to control the disease, rather than be controlled by it, is a daily struggle. Diane Williams Hymons, 57, a social service consultant and therapist in Silver Spring, Md., has had lifelong problems with bronchitis, allergies and asthma. In the last five or 10 years, her breathing difficulties have worsened, but she was told only three years ago that she had C.O.P.D. It motivated her to give up cigarettes, after smoking for more than 30 years.

"I have good days, and days that aren't as great," she said. "I sometimes have trouble walking up steps. I have to stop and catch my breath."

She is "usually fine" when sitting, she said.

Her mother, also a former smoker with chronic lung disease, has been in a pulmonary rehabilitation program. Ms. Williams Hymons's doctor has not recommended such a program for her, but she has no idea why. They have discussed surgery to remove part of her lungs, which helps some people with emphysema, but she said no decision had been made yet because it is not clear whether her main problem is emphysema, or asthma. She is not sure what her prognosis is.

A Risky Approach

Ms. Williams Hymons has been taking prednisone pills for years, something both she and her doctor know is risky. But when she tries to cut back, the disease flares up. She has many side effects from the drug.

"My bone density is not looking real good," she said. "I have cramps in my hands and feet, weight gain and bloating, the moon face, excess facial hair, fat deposits between my shoulder blades. Yes, I have those."

She has broken two ribs just from coughing, probably because the prednisone has thinned her bones, she said. She went to a hospital for the rib pain last year and was given so much asthma medication to stop the coughing that it caused abnormal heart rhythms. She wound up in the cardiac unit for five days, and now says "never again" to being hospitalized.

Her doctor orders regular bone density tests.

"I know he's concerned, like I'm concerned," Ms. Williams Hymons said, "but we can't seem to kind of get things under control."

A recent study of 25 primary care practices around the United States treating chronic lung disease found that most did not perform spirometry, a simple breathing test used to diagnose or monitor the disease, even when they had the equipment to do so. The test takes only a few minutes, but doctors said there was not enough time during the usual 15-minute visit. Similarly, the practices did not offer much help with smoking cessation.

The author of the study (published in August in The American Journal of Medicine), Pamela L. Moore, said many of the doctors felt unable to help smokers quit, and believed that as long as patients kept smoking, treatments for lung disease would be for nought. But Dr. Moore said research had found that people are more likely to quit or start cutting back if doctors recommend it.

Labeling the disease self-induced is "an unbelievably painful concept," Dr. Thomashow said. "Patients blame themselves, their family blames them, we even have evidence that health providers blame them."

Shame and Blame

Indeed, a patient at a clinic in Manhattan, with nasal oxygen tubing attached to equipment in a backpack, said, "This is one of the evils you must suffer for the things we did in our life."

Smoking also contributes to heart disease, Dr. Thomashow said, and yet people "don't waste time blaming the patient."

"This disease quite frankly has an image problem," said Dr. James Kiley, the director of lung research at the National Heart, Lung and Blood Institute, which started a campaign last January to educate people about the disease.

In one way or another every patient seems to have encountered what John Walsh, president of the C.O.P.D. Foundation, calls the "shame and blame" attached to this disease.

It is a familiar theme to Ms. Dorney Koppel, who agreed to become a spokeswoman for the institute's education campaign. She was surprised to be asked to help, she said, because the campaign needed a celebrity, and she is merely married to one. She asked the person who invited her, whether there were no famous people with C.O.P.D.

"I was told, 'None who will admit it,'" she said.

Ms. Dorney Koppel, who is candid about being a former smoker, calls the illness the Rodney Dangerfield of diseases.

"You don't get no respect," she said. "I have to pay publicly for my sins. I have paid."

Like many patients, Ms. Rommes has both emphysema and chronic bronchitis, along with asthma. She had symptoms for years before receiving the correct diagnosis.

She began smoking in college during the 1960's, when she was 18. People whom she admired smoked, and it seemed cool. She smoked for 30 years.

When she quit in 1992, it was not because she thought she was ill, but because she realized that she was organizing her day around chances to smoke. But she almost certainly was ill. She was only 50, but climbing a flight of stairs left her winded. From what she found in medical dictionaries, she began to suspect she had lung disease.

By 2000 she was so short of breath that she consulted her doctor about it.

He gave her a spirometry test. In one second, healthy adults should be able to blow out 80 percent of the total they can exhale; her score was 34 percent, which, she knows now, indicated moderate to severe lung disease.

"I honestly don't know whether he knew," she said of her doctor. "I suspect he did, but he didn't call it emphysema."

"He put me on a couple of inhalers and he called it asthma," Ms. Rommes said. " I sort of ignored the whole thing, because the inhalers did make me feel better. I started to gain some weight, and things got progressively worse."

She cannot help wondering now if she could have avoided becoming so desperately ill, if she had only known soon-

ABOUT THE SERIES They are the leading causes of illness and death in the United States today — heart disease, cancer, stroke, chronic obstructive pulmonary disease, diabetes and Alzheimer's disease, in that order — and they have a lot in common.

They are expensive, accounting for 25 percent of the nation's annual health care expenditures, said Jonathan Skinner, a health economist at Dartmouth College.

They come in clusters — accumulations of plaque in arteries lead to heart attacks but also can lead to strokes and predispose to Alzheimer's disease. Diabetes can lead to heart disease, stroke and cancer. Smoking can lead to chronic obstructive pulmonary disease, cancer and heart disease, which in turn predisposes to Alzheimer's.

The outlook for them is improving — people are getting the diseases later in life, and death rates are falling.

Still, in many instances, patients are undertreated or treated inappropriately. In some cases, science has not offered answers, but in others, the medical system has been unable to turn proven remedies into everyday care.

Today, The New York Times examines the No. 4 killer, chronic obstructive pulmonary disease, or C.O.P.D. The term includes chronic bronchitis and emphysema — progressive, incurable diseases usually caused by smoking. Twelve million cases have been diagnosed in this country, and researchers think 12 million more Americans have the disease, but do not know it.

To explain what it feels like to have severe lung disease, Patricia A. Jellen, a nurse and program director in the Center for Chest Disease at NewYork-Presbyterian/Columbia hospital, says: "Take a deep breath. Don't let it out. Now, try to take another one." The second breath is practically impossible. "That's how these patients feel all the time," Ms. Jellen says.

But in its early stages, the disease may go unnoticed because people grow used to having a smoker's cough, or assume they're short of breath because of aging, gaining weight or just being out of shape. Doctors do not test for lung disease as aggressively as they do for high blood pressure or cholesterol, perhaps because they are rushed, blame smokers for bringing it on themselves, or mistakenly believe that not much can be done for it. Too often, the disease is not detected until patients have begun sinking into a spiral of worsening illness and disability.

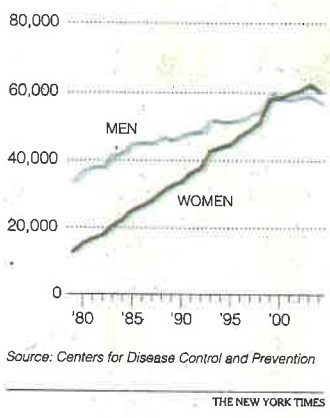
Previous articles in this series have examined heart disease, stroke, cancer and diabetes. They are available at nytimes.com/sixkillers. The last report in the series will cover Alzheimer's disease. In-depth medical reference on these conditions is available at nytimes.com/healthguide.

ERIC THAYER FOR THE NEW YORK TIMES

Jean Rommes, who smoked for 30 years, suffers from chronic obstructive pulmonary disease.

Deaths Among Women

Although chronic obstructive pulmonary disease was once considered an old man's disease, the number of women who died from it nearly quadrupled since 1980, largely due to their increased smoking in recent decades.



Source: Centers for Disease Control and Prevention

THE NEW YORK TIMES

WHAT TO KNOW

Certain Symptoms Should Raise Red Flags for Doctors

By DENISE GRADY

Not everyone needs to be tested for chronic obstructive pulmonary disease. But certain symptoms are cause for concern: shortness of breath, chronic coughing or wheezing, congestion or clogging of the airways with mucus.

Smokers and former smokers have the greatest risk, but 10 percent to 15 percent of cases occur in people who never smoked. Persistent respiratory problems should always be checked, regardless of smoking history. Shortness of breath can also be a symptom of heart disease.

People are not always aware of the symptoms, maybe because they have become used to them or do not want to believe they could be ill, and, during the usual rushed office visit, doctors may not investigate deeply enough.

"We're missing people who have real disease, not just people with minor disease," said Dr. Byron Thomashow, director of the Center for Chest Disease at NewYork-Presbyterian/Columbia hospital.

Dr. Thomashow said doctors should ask, "How's your breathing compared to six months or a year ago? Can you exercise and function the way you did in the past?"

If a problem is suspected, the next step will probably be a breathing test called spirometry that takes a few minutes and can be done in many doctors' offices. Some doctors think that anyone who has smoked a pack a day for 10 years or more should have spirometry, even if there are no symptoms. A poor result might motivate a smoker to quit, or at least identify a condition that should be monitored. Others say that only people with symptoms should be tested because a symptom-free smoker may have a normal result and then think it safe to continue smoking.

This month, the American College of Physicians issued new guidelines for the disease. They recommended spirometry only for people with symptoms and said those scoring below a certain level should be given inhaled medicines to open the airways or treat inflammation, or both. It also recommended oxygen for patients with low blood oxygen while resting, and pulmonary rehabilitation programs for those with symptoms and poor spirometry readings. Many specialists advocate starting treatment even earlier than the guidelines recommend.

ANNIE TRITT FOR THE NEW YORK TIMES

Dr. Byron Thomashow leads a chest disease center in New York.

Information about lung disease is available from:

The National Heart Lung and Blood Institute: Phone: (301) 592-8573; nhlbi.nih.gov/health/public/lung/copd/index.htm.

The C.O.P.D. Foundation: (866) 316-COPD (2673); copdfoundation.org. (It also has a registry that patients can join to learn about and join in clinical trials.)

The American Lung Association: (800) 548-8252; lungusa.org.

"Life and Breath," a book about C.O.P.D. by Dr. Neil Schachter.

er what a dangerous illness she had.

The turning point came in February 2003 when she tried to take a shower and found that she could not breathe. The steam all but suffocated her. She managed to drive from her home in Osceola, Iowa, to her doctor's office, struggle across the parking lot like someone climbing a mountain and collapse, gasping, onto a couch inside the clinic. Her blood oxygen was perilously low, two-thirds of normal, even when she was given oxygen. The hospital was next door, and her doctor had her admitted immediately.

Fear and Anger

She had Type 2 diabetes as well as lung disease, and her doctor told her that losing weight would help both illnesses. But she said, "He made it pretty clear that he didn't think I would or could."

Motivated by fear and anger, she began riding an exercise bike, walking on a treadmill, lifting weights at a gym and eating only 1,200 to 1,500 calories a day, mostly lean meat with plenty of vegetables and fruit.

"I kind of came to the conclusion that if I didn't, I probably wasn't going to be around," Ms. Rommes said. "I wasn't ready to check out. And my husband was beginning to show the signs of Alzheimer's disease. I knew that if I couldn't continue to manage our affairs, it wasn't going to work out."

By December 2003, her efforts were starting to pay off. She went from needing oxygen around the clock to using it only for sleeping, and by January 2005 she no longer needed it at all. She was able to lower the doses of her inhalers and diabetes medicines. By February 2005, she had lost 100 pounds.

The daily exercise also helped her deal with the stress of her husband's illness. He died in June.

"I had no clue that exercise would do as much for ability to breathe as it did," she said, adding that it helped more than the drugs, which she described as "really pretty minimal."

She is hooked on exercise now, getting up every morning at 5 a.m. to walk for 45 minutes on the treadmill. She goes at it hard enough to break a sweat, wearing a blood oxygen monitor to make sure her level does not dip too low (if it does, she slows down or uses special breathing techniques to bring it up). She walks outdoors, as well, and three times a week, she works out with weights at a gym.

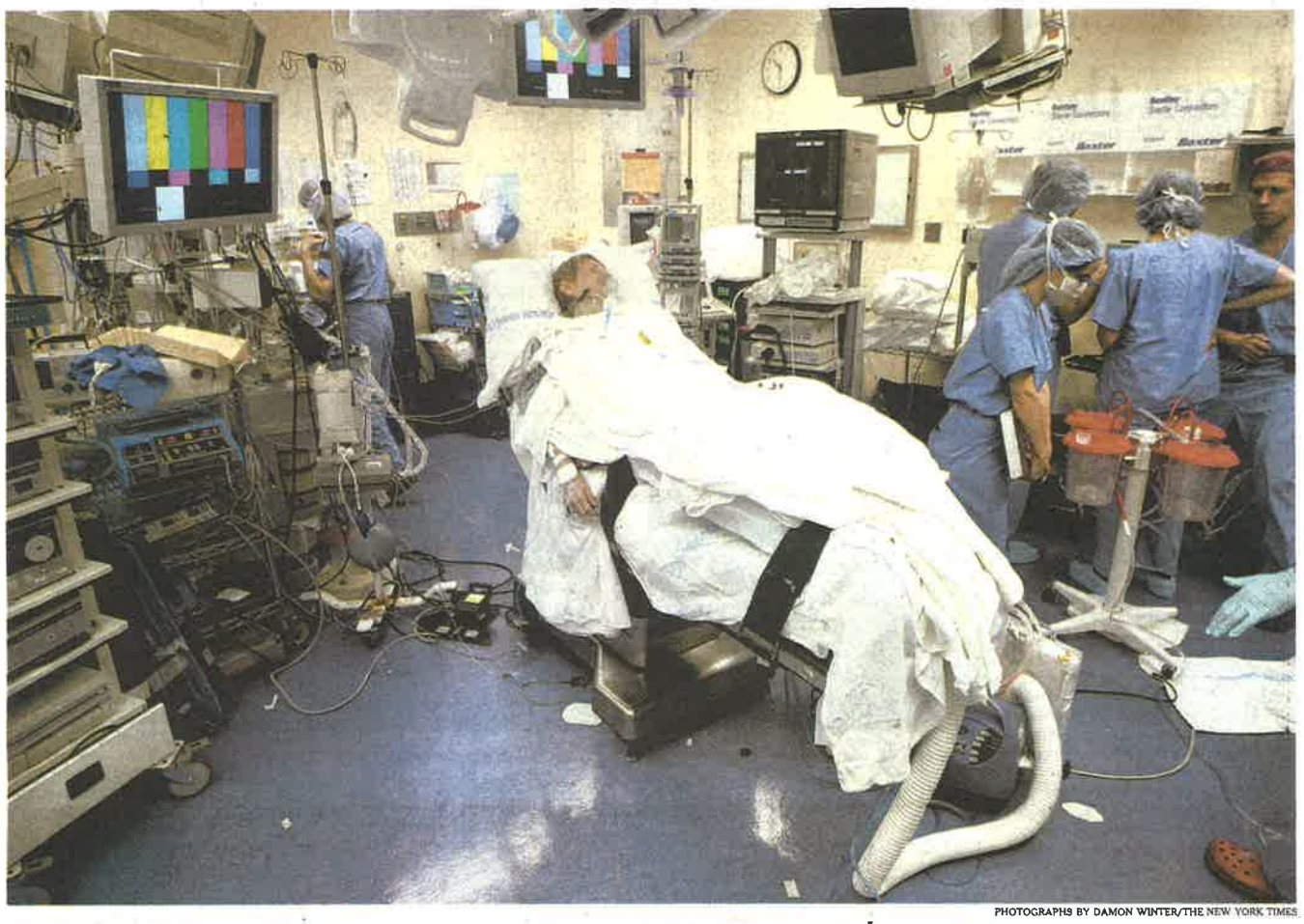
"Exercise is absolutely essential, and it's essential to start it as soon as you know you have C.O.P.D.," she said.

Exercise does not heal or strengthen the lungs themselves, but it improves overall fitness, which people with lung disease need desperately because their shortness of breath leads to inactivity, muscle wasting and loss of stamina.

"Both my pulmonologist and my regular doctor have made it really, really clear to me that I have not increased my lung capacity at all," Ms. Rommes said. "But I've improved the mechanics. I've done everything I know how to do to make the lung capacity as efficient as possible. That's the key for me; I know there are lots of people with this disease who don't exercise, who I guess just give up."

She realizes that she has two serious chronic diseases that could shorten her life. But it does not worry her much, she said, because she figures she is doing everything she can to take care of herself, and would rather spend her time enjoying life — work, reading, opera, traveling, children and grandchildren.

"I will tell pretty much anybody that I have emphysema," Ms. Rommes said. "They say, 'Did you smoke?' I say, 'Yes I did, for 30 years, and I quit in 1992.' Maybe it's why I've attacked this the way I did. O.K., I did it to myself, and so I better do everything I can to get out of it. We all do things in our lives that are stupid, and then you do what you can to fix it"



PHOTOGRAPHS BY DAMON WINTER/THE NEW YORK TIMES

Madeline Gallagher, 65, an emphysema patient, after doctors at NewYork-Presbyterian/Columbia hospital removed 30 percent of each of her lungs.

SURGERY

After Early Success, Operations to Remove Damaged Tissues Have Fallen Sharply

By DENISE GRADY

Intently watching the rise and fall of Madeline Gallagher's abdomen as she lay on the operating table, Dr. Mark Ginsburg said, "Her diaphragm is finally moving. That's a really good sign."

He had just removed 30 percent of each of her lungs. Now, he said, she was breathing normally, for the first time in many years.

"It's counterintuitive," he said. "Patients have poor lung function, and you help them by taking out part of their lungs."

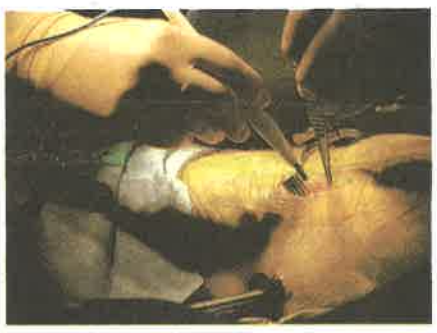
Mrs. Gallagher, 65, has emphysema, first diagnosed in 1993. She had smoked for 35 years, starting when she was 15, and quit in 1992. Initially not severe, the disease worsened over the years until cleaning the house, shopping, just walking down the street became a struggle. More and more, she needed oxygen. Pneumonia put her in the hospital twice. Already thin, she lost 15 pounds, a danger sign in emphysema.

On Oct. 17, at NewYork-Presbyterian/Columbia hospital, she had lung-volume reduction surgery. It is not a cure, but has been found to help certain people with emphysema — possibly 10 percent — those with such poor lung function that they can barely exercise, and with disease mostly localized to parts of the lungs that can be removed. With the surgery many feel better, and some also live longer.

Lungs damaged by emphysema lose their elasticity and trap stale air. As a result, they can enlarge, or hyperinflate, to 150 percent of their normal size, or more, preventing the diaphragm from moving normally. Instinctively, patients begin working other muscles to compensate, and sometimes become barrel-chested or raise their shoulders so much that they look like they are wearing shoulder pads. On X-rays, abnormally wide spaces between the ribs are a telltale sign of the disease. Doctors and nurses can spot patients in waiting rooms, sitting straight up on the edges of their seats, leaning on their hands with elbows stiff and shoulders up as if they are about to push off. But no matter how hard they try, they cannot take in enough air.

In theory, by cutting away the most diseased tissue, the operation should stop some of the air trapping, and by restoring the lungs to their proper size, it should let the diaphragm work so that the chest can move more normally.

The surgery has had a rocky history. Reports of fantastic recoveries made it popular in the 1990s, but health officials wanted a rigorous study. A government-sponsored experiment began in 1996, and ultimately found the operation beneficial only for some types of emphysema, and useless or even harmful in others. In 2003, Medicare decided to cover it only for people like those who had done well in the study, and only at experienced hospitals.



A nurse at NewYork-Presbyterian/Columbia hospital, top, with a tool that cuts and staples the lungs. Center, Dr. Steve Xydas works on Mrs. Gallagher's left lung. Above, X-rays of Mrs. Gallagher's lungs.

The number of operations has fallen sharply, from thousands a year to under 200 in 2006. Some researchers praise the outcome as a triumph of data over wishful thinking, but others say that the pendulum has swung too far, and that many patients who could be helped are missing out.

Meanwhile, researchers are experimenting with valves and other devices that are implanted in the lungs through scopes passed down the throat, without cutting through the chest. The devices are meant to vent trapped air into the airways, where it can be exhaled, and to deflate diseased parts of the lungs — without having to cut out any tissue. In some cases, the implants might replace surgery, but they might also help patients who are not candidates for the surgery.

After Mrs. Gallagher's second bout with pneumonia, doctors recommended lung-volume reduction, and she agreed to it in the hope that it would give her back some of her life — let her be more active, take trips with her husband, keep up with her grandchildren.

Dr. Ginsburg operated through tiny slits, rather than opening the entire chest. He inserted a camera, and guided by a monitor, cut away a cellphone-size slab of each lung. The operation took about 90 minutes.

"We did exactly what we wanted to do," Dr. Ginsburg said. "The question is, will it work?" Ideally, the operation can set the clock back three to five years, he said, but added, "At the end of the day she's only as good as what she has left."

Mrs. Gallagher had a rough recovery. She spent 10 days in the hospital, twice as long as expected. She had trouble breathing and could not keep food down, which worried her family because she was already frail.

A few days after leaving the hospital, she was supposed to resume exercising in a pulmonary rehabilitation program that had begun before the surgery. Her daughter wondered how she would manage, when she was too weak even to dress herself.

But she bounced back quickly. Two weeks later, she said, "I'm doing terrific," adding that she had just walked 25 minutes on a treadmill without needing oxygen, something she could not do before. Her appetite was back, and she had polished off a dinner of veal parmesan and baked ziti.

"My breathing isn't as shallow as it used to be," Mrs. Gallagher said. "I can take a deeper breath. I'm very, very happy."

SEARCH FOR TREATMENT

Researchers Focus on Genes and Inflammation in Search for Clues to Chronic Obstructive Lung Disease

By DENISE GRADY

Two big ideas dominate the latest thinking about chronic obstructive pulmonary disease: one, genes determine who develops it, and two, it involves systemic inflammation that affects far more than the lungs.

Genetics may explain why only about 20 percent of smokers ever get C.O.P.D.: researchers think the lungs of some people have an inherited sensitivity to smoke.

One genetic disorder is known to cause emphysema, a condition called alpha-1-antitrypsin deficiency, which accounts for a small percentage of cases. Patients lack a protein that normally protects the lungs. They can develop emphysema even if they never smoke, and are highly prone to it if they do smoke. Identifying the deficiency made it possible to develop a treatment, an intravenous form of the needed protein.

Several studies are under way to look for other genes involved in chronic lung disease. The hope is that finding them will lead to other treatments, methods of prevention or at least a way to warn people who might be at high risk from smoking.

"I would love to develop the Lipitor equivalent for cigarette smokers," said Dr. Ronald Crystal, who is directing a genetic study at NewYork-Presbyterian/Weill Cornell hospital.

Just as people take Lipitor to lower high cholesterol, he said, those who cannot stop smoking, and who have a high risk of C.O.P.D., might be offered a drug to protect their lungs.

"It may not be the politically correct thing to say, but it may save a lot of lives," Dr. Crystal said, noting that nicotine addiction is so powerful that some people simply cannot quit.

Another study, just starting at 16 medical centers, will include people who have chronic lung disease or are at risk for it because of smoking.

"We'll analyze their entire genome to find the genes that cause this disease," said Dr. James D. Crapo of National Jewish Medical and Research Center in Denver.

He said he expected to find five or six genes, including one that codes for a strong antioxidant.

"If you have high levels, you'll be resistant against getting C.O.P.D." he said. "It would teach us to make drugs that could intervene. We're not talking about giving people a drug so they can smoke. We want to give something to prevent progression of the disease."

The study could also have broader applications, Dr. Crapo said, because many other chronic diseases seem to involve the same underlying condition — inflammation, which is what happens when a cut or an insect bite turns red, hot and swollen. It is a defense mechanism involving armies of immune-system cells that spew out potent biochemicals to fight germs, toxins or foreign bodies, and in the short term it is a good thing.

But chronic inflammation, which can be brought on by smoking, obesity and other factors, is another story. "Even if you don't smoke, you're exposed to a wide variety of inflammatory agents throughout your lifetime, and we can learn what components of our genetic code protect us," Dr. Crapo said.

"I think it's going to lead to a breakthrough in understanding and a cure for diseases related to environmental and occupational stress."

119,000
Number of deaths from chronic obstructive pulmonary disease in the United States in 2000

182%
Increase in the death rate for women due to C.O.P.D. from 1980 to 2000

12.1 million
Number of people age 25 or over who reported having C.O.P.D. in a 2001 national health survey

24 million
Total number of Americans with impaired lung function, indicating a possible underdiagnosis of C.O.P.D.

2020
The year by which C.O.P.D. is projected to become the third leading cause of death in the U.S.

$32.1 billion
Estimated overall cost of C.O.P.D. in 2002, including medical expenses and the cost of lost productivity because of illness and premature death

Source: Centers for Disease Control and Prevention