[HEALTH]

Hormone hazards

Vasiliki Kostoula, a Greek breast cancer patient, listens to her doctor after a radiological medical examination in an Athens hospital on Oct. 29, 2008. Kostoula had a mastectomy on her right breast and is currently undergoing chemotherapy. PHOTO: REUTERS

The memorial of former Brazilian President Juscelino Kubistchek is lit up in pink in support of a national campaign against breast cancer in Brasilia, Brazil, on Oct. 21, 2008.

Right: Some 1,500 bras hang on lines during a promotion against breast cancer in Bern's Federal Square. More then 1,500 women die every year of breast cancer in Switzerland. PHOTOS: REUTERS

A newly released study has firmly tied the use of estrogen and progestin by menopausal women to breast cancer

BY **MARILYNN MARCHIONE**
AP, SAN ANTONIO

You can still diminish risk [by quitting menopause hormones], even if you've been on hormones for a long time ... It's not like smoking where you have to wait 10 or 15 years for the risk to come down.

— Claudine Isaacs, cancer specialist

Taking menopause hormones for five years doubles the risk of developing breast cancer, according to a new analysis of a big US federal government study that reveals the most dramatic evidence yet of the dangers of these still-popular pills.

Even women who took estrogen and progestin pills for as little as a couple of years had a greater chance of getting cancer. And when they stopped taking them, their odds quickly improved, returning to a normal risk level roughly two years after quitting.

Collectively, these new findings are likely to end any doubt that the risks outweigh the benefits for most women.

It is clear that breast cancer rates plunged in recent years mainly because millions of women quit hormone therapy and fewer newly menopausal women started on it, said the study's leader, Rowan Chlebowski of Harbor-UCLA Medical Center in Los Angeles.

"It's an excellent message for women: You can still diminish risk [by quitting], even if you've been on hormones for a long time," said Claudine Isaacs of Georgetown University's Lombardi Comprehensive Cancer Center. "It's not like smoking where you have to wait 10 or 15 years for the risk to come down." Study results were given Saturday at the San Antonio Breast Cancer Symposium.

They are from the Women's Health Initiative, which tested estrogen and progestin pills that doctors long believed would prevent heart disease, bone loss and many other problems in women after menopause. The main part of the study was stopped in 2002 when researchers saw surprisingly higher risks of heart problems and breast cancer in hormone users.

Since then, experts have debated whether these risks apply to women who start on hormones when they enter menopause, usually in their 50s, and take them for shorter periods of time. Most of the women in the federal study were in their 60s and well past menopause.

So the advice has been to use hormones only if symptoms like hot flashes are severe, and at the lowest dose and shortest time possible. The new study sharpens that message, Chlebowski said.

"It does change the balance" on whether to start on treatment at all, he said.

Even so, most women will not get breast cancer by taking the pills short-term. The increased cancer risk from a couple of years of hormone use translates to a few extra cases of breast cancer a year for every 1,000 women on hormones. This risk accumulates with each year of use, though.

The Women's Health Initiative study had two parts. In one, 16,608 women closely matched for age, weight and other health factors were randomly assigned to take either Wyeth Pharmaceuticals' Prempro — estrogen and progestin — or dummy pills.

This part was halted when researchers saw a 26 percent higher risk of breast cancer in those on Prempro.

But that was an average over the five-and-a-half years women were on the pills. For the new study, researchers tracked 15,387 of these women through July 2005, and plotted breast cancer cases as they occurred over time.

They saw a clear trend: Risk rose with the start of use, peaked when the study ended and fell as nearly all hormone users stopped taking their pills. At the peak, the breast cancer risk for pill takers was twice that of the others.

Think of it as US President George W. Bush's public approval rating, said another study leader, Peter Ravdin of the University of Texas M.D. Anderson Cancer Center in Houston.

"Bush's popularity may be 50 percent on average, but it might have been descending the whole time he was president," Ravdin said.

In the second part of the federal study, researchers observed 16,121 women who had already been on hormones for an average of seven years and another group of 25,328 women who had never used them. No results on breast cancer risk in these women have been given until now.

Plotting cases over time, researchers saw in retrospect that hormone users had started out with twice the risk of breast cancer as the others, and it fell as use declined. Among those taking hormones at the start of the study, use dropped to 41 percent in 2003, the year after the main results made news.

In the general population, use of hormone products has dropped 70 percent since the study, said another of its leaders, JoAnn Manson, preventive medicine chief at Harvard's Brigham and Women's Hospital in Boston.

That corresponds with big drops in breast cancer cases, but some scientists have said this could be due to a fall-off in mammograms, which would mean fewer cancers were being detected, not necessarily that fewer were occurring.

The new study puts that theory to rest. Mammography rates were virtually the same among those taking hormones and those not.

"It is clear that changing mammography patterns cannot explain the dramatic reductions in breast cancer risk," Manson said.

"The data are getting stronger," said C. Kent Osborne, a breast cancer specialist at Baylor College of Medicine in Houston.

Women who do need the pills should not panic, though the doubling of risk — a 100 percent increase — for long-term users is quite worrisome, cancer specialists say. Although the new study does not calculate risks in terms of actual cases, previous research showed that the average increased risk of 26 percent meant a difference of a few extra cases a year for every 1,000 women on hormone pills, compared with nonusers.

"Hormone therapy remains a good health care choice to relieve moderate to severe menopausal symptoms," says a statement from Wyeth, which made the pills used in the study.

"Most women should be able to discontinue hormones in three to four years," or at least reduce their dose, Manson said.

A future analysis will look at other women in the study who took only estrogen, generally women who have had hysterectomies.

ON THE NET: www.sabcs.org

Pink balloons are launched as thousands of participants start the fifth annual Pink Walkathon, a 3.6km charity walk in support of breast cancer awareness, in the Gulf Emirates of Dubai, on Oct. 17, 2008. PHOTO: EPA

Keep it down

Protecting children from unwitting exposure to loud noises can have a profound impact on everything from their hearing to test scores and behavior in school

BY **JANE E. BRODY**
NY TIMES NEWS SERVICE, NEW YORK

Michael became hooked on headphones in his early teens. He walked the streets of Brooklyn day after day with his favorite music blasting directly into his ears. By his early 20s, the sensory hair cells in his inner ears had been permanently damaged and Michael had lost much of his upper-range hearing.

The Children's Hearing Institute reports that hearing loss among children and young adults is rising in the US, and that one-third of the damage is caused by noise.

According to the American Academy of Audiology, about one child in eight has noise-induced hearing loss. That means some 5 million children have an entirely preventable disability that will stay with them for life.

The academy has begun a "turn it to the left" (the volume dial, that is) awareness campaign in hopes of protecting current and future generations of youngsters from unwittingly damaging their hearing. Often, the problem is not detected until children develop persistent ringing in the ears or begin to have learning or behavior problems in school because of trouble understanding speech.

Although newborns are now routinely screened for hearing loss, there is no US federal mandate for screening the hearing of school-age children. What testing is done often fails to check hearing at high enough pitches, a federal research team pointed out in the journal *Pediatrics*.

SURROUNDED BY NOISE

We live in a noisy world. Young and old alike are beset by sounds over which we may have little or no control: power mowers, leaf blowers, snow blowers, car and house alarms, sirens, motorcycles, Jet Skis, loudspeakers, even movie previews.

We attend rock concerts, weddings, parties and sports events at which the music is so loud you can hardly hear the person sitting next to you. At home, televisions, stereos and computer games are often turned up so loud that listeners cannot hear a doorbell or a telephone.

Many "modern" restaurants have opted for noise enhancement instead of abatement. And try having a conversation in a school cafeteria at lunchtime.

Any time you need to shout to be heard by someone near you, your hearing is most likely to be in a decibel danger zone.

As if environmental noise were not enough, now we besiege children with noisy toys and personal listening devices that can permanently damage their hearing. Toys that meet the safety standards of the American Society for Testing and Materials can produce sound up to 138 decibels, as loud as a jet taking off. Yet workplace rules require hearing protection for those exposed to noise above 85 decibels.

A series of studies conducted in 2002 among 116 infants by researchers at Johns Hopkins indicated that even moderate background noise can interfere with how they learn language. The effect on babies' hearing in a noisy house is similar to what an older person with age-related hearing loss may encounter at a crowded cocktail party.

A landmark study in 1975 found that children in classrooms on the noisy side of a school had lower reading scores than those whose classes were on the quiet side.

Noise-induced hearing loss can come about in two ways: from a brief exposure to a very loud noise or from consistent exposure to moderate-level noise. Thus, there is much concern about the lasting effects of MP3 players that are turned up loud enough to block out surrounding sound, like street noise. An MP3 player at maximum volume produces about 105 decibels — 100 times as intense as 85 decibels, where hearing damage begins. (For every 10 decibels, sound intensity increases tenfold.)

The National Institute for Occupational Safety and Health says 110 decibels can produce hearing damage after just 1 minute, 29 seconds of exposure. The League for the Hard of Hearing cautions that "noise levels above 85 decibels will harm hearing over time" and that levels above 140 decibels — the pain threshold — can damage hearing after just one exposure.

New bone-conduction headphones that hook over the ears and pass sound through the skull to the inner ear may not solve the problem. While they allow listeners to hear an oncoming car or a person speaking, users may turn up the volume to overcome ambient noise, damaging the 15,000 tiny hair cells in the inner ear that transfer sound energy to the brain.

Once damaged, hair cells can neither be repaired nor replaced. The damage makes it difficult to hear high-pitched sounds, including certain speech sounds and the voices of women and children. Tinnitus, a continuous ringing, roaring or clicking in the ears, can also result.

PROTECTING YOUNG EARS

Before buying noisemaking toys, parents would do well to listen to how loud they are. If the item comes with a volume control, monitor its use to make sure it is kept near the lowest level. Consider returning gifts that make loud noises, or disable the noise-making function. Or restrict the use of noisy toys to outside play areas.

Children who play computer games and stereo equipment should be warned to keep the volume down. Time spent in video arcades, where the noise level can exceed 110 decibels, should be strictly limited. Most iPods have a control that allows parents to set a maximum volume.

Avoid taking children to loud action movies. If you do go and the sound seems deafening, ask the management to turn down the volume or insist on your money back. Children who play in bands and teenagers who use power tools, gardening equipment or guns should be made to wear hearing protection, available at pharmacies and hardware and sporting goods stores.

The League for the Hard of Hearing urges parents to encourage participation in quiet activities, like reading, watching family-oriented films, doing puzzles, making things with construction toys, playing educational computer games, drawing and painting, and visiting libraries and museums.