

WHY ONLINE GAMES ARE SO ADDICTIVE

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Reader's Digest

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NEW HOPE

In the Fight Against
BREAST CANCER

| What's on the Horizon
| and What's Here Now

PLUS
A Husband's
Guide to Being
There for Her

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IS THERE A **PSYCHOPATH** IN YOUR LIFE?

CURING BREAST CANCER



We're nearly there, thanks to these
new treatments | BY LAM LYE CHING

ADAPTED FROM ARTICLE BY LISA DAVIS

In an operating theatre in London's Middlesex Hospital, Linda Lines lies unconscious. Sterile green gowns drape her body, leaving exposed only her right breast and outstretched arm. Linda has breast cancer; in the upper part of her breast, a mass of runaway cells has grown to about the size of a pea. Given her age – 55 – and the size of her tumour, Linda is typical of the thousands of women diagnosed with invasive breast cancer each year. But her experience is about

to take a sharp turn from the typical.

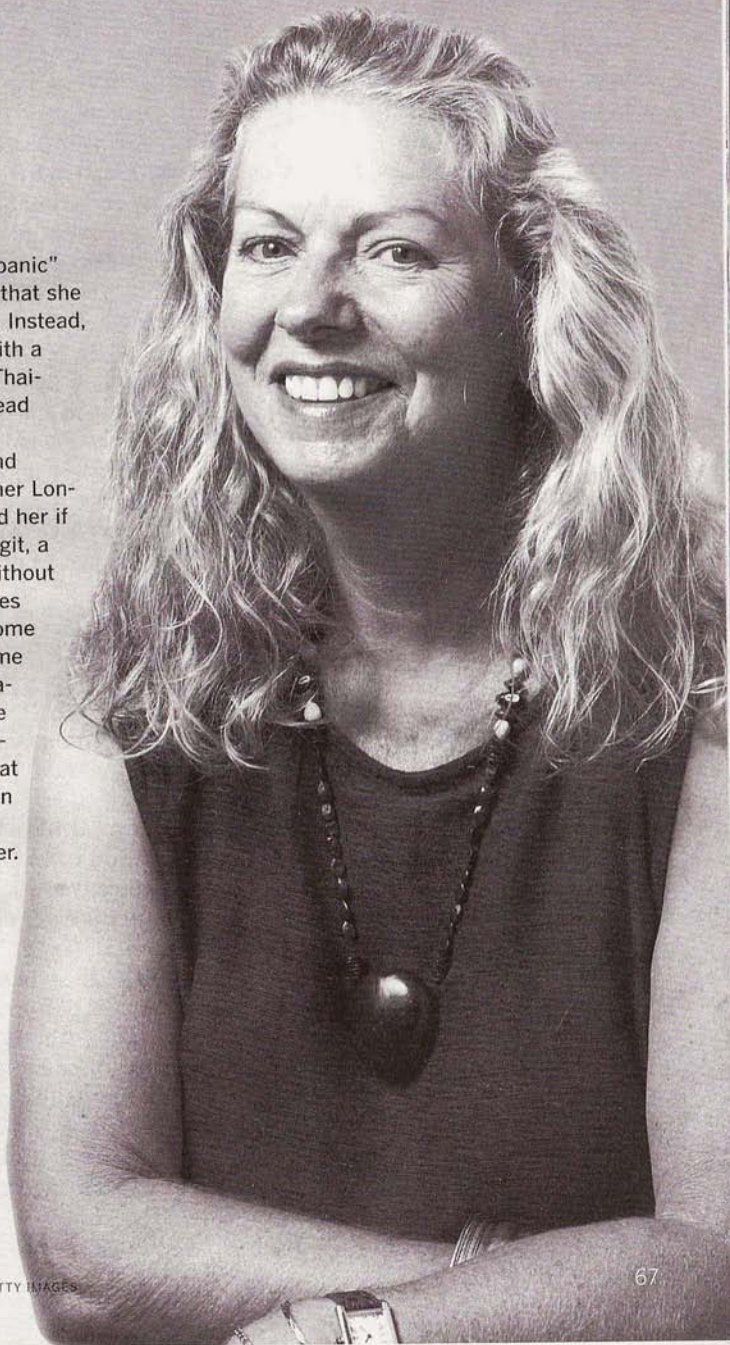
After the tumour is neatly excised, surgeon Jayant Vaidya reaches for a slim probe with a tiny metal sphere at one end and inserts it into Lines's breast. He is going to deliver radio waves directly on to the tumour site.

Satisfied with the probe's position, he signals for the electron generator to be switched on. To the sound of a gentle bleep, it begins generating "soft" X-rays, which pass out through the sphere.

Twenty-five minutes later, Vaidya

Linda Lines

Lines "refused to panic" when she learned that she had breast cancer. Instead, she went ahead with a family holiday in Thailand. There, she read up on treatments, eating healthily and getting fit. When her London surgeon asked her if she'd heard of Targit, a one-off therapy without any follow-up, Lines said she'd have some of that. She became the first British patient to opt for the therapy – a courageous decision that has paid off. Seven years later, she is still clear of cancer.



removes the probe and inspects the small incision. He nods to the team: "Looking great." With a couple of stitches he closes it up.

If all has gone well, not only has the tumour in Lines's breast been destroyed, but any rogue cells have been mopped up, eliminating the need for weeks of radiotherapy. This is targeted intra-operative radiotherapy (Targit). It's a far cry from the early days of treatment, when surgeons routinely removed not just a woman's breast but the muscles of her chest, lymph nodes and some fat and skin, disfiguring and frequently disabling her. Targit is based on the premise that, since 90 per cent of early breast cancer recur-

mortality further. But treatment is getting a little less gruelling and more effective every day. The number of breast cancer deaths remains high – the International Agency for Research on Cancer's database shows that in 2002, the most recent figures available, there were 58,495 new cases and 26,818 deaths from the disease across Southeast Asia alone. However, experts feel the situation will get better. "As more new and effective treatments are developed and become less costly, the number of deaths should drop and survival should improve," says Dr Yip Cheng-Har, consultant breast surgeon at the University Malaya Medical Centre in Kuala Lumpur. Here are some

Targit is one example of a growing number of new breast cancer treatments that are more targeted and therefore gentler on the body

rences occur at the site of the original tumour, it makes sense to limit therapy to that spot.

This approach is just one example of a growing number of new breast cancer treatments that are more targeted and therefore gentler on the body – and, it is hoped, better able to save lives.

Learn more, cut less: That's a quick summary of the trend over the past century, as researchers have figured out more about how breast cancer grows and what makes it deadly. Treatment is by no means an easy ride; for one thing, some of the new techniques have simply been added onto sledgehammer regimens as a way to lower

of the most promising new breast cancer treatments.

Surgery Minus the Scalpel

The notion of bathing breast tissue with protective radio waves at the time of surgery is exciting, though still experimental. Jayant Vaidya originally hit on the idea as a way of offering treatment in one go for patients in his native India. "Targit offers a degree of precision impossible with traditional irradiation delivered externally," he says. "The surgeon can see where to direct the rays. It delivers a targeted dose and doesn't endanger heart or lungs."

Eight years into a UK-led global



Gwen Goyena

When Goyena was diagnosed with breast cancer, she was stunned. "It was unreal. I kept checking the name on the paper with my results. I could not believe they were really my results." Her surgeon told her about a new, less invasive technique called sentinel node biopsy. After the tumour was removed, her doctor took just one sentinel lymph node and seven axillary nodes to see if the cancer had spread. It hadn't, and the procedure was so mild that Goyena walked out of the hospital a few hours later with regular-size bandages on her right breast and underarm.

A portrait of Lynn Leong, a woman with short dark hair and glasses, smiling. She is wearing a light-colored top with a decorative pattern around the neckline and a small cross necklace. The background is plain white.

Lynn Leong

A routine exam uncovered a lump in Leong's right breast.

After learning that it was breast cancer, a stream of questions ran through her mind. "How will I react to chemotherapy?" Leong recalls thinking. "How will I look without hair? How would I tell my son who was about to migrate to the United States?" Five years later, after undergoing surgery, chemo, radiation therapy and treatment with both tamoxifen and the aromatase inhibitor letrozole, she remains cancer-free. What's more, the retired teacher and mother of two grown children is living life to the fullest. "I counsel breast cancer patients every week, volunteer at my church and visit my grandchildren every year in the US."

trial, more than 600 patients have been treated. Vaidya says the results so far have been promising, with few relapses. "So far, there has been no concern at all."

Asian patients will soon benefit from targeted radiation therapy. Targit will be available in Bangkok later this year, and Japanese and Malaysian health authorities are also considering the treatment. "Targeted radiation therapy will be more widely available in Asia in a few years once we have confirmed trial results," says Dr Gurcharan Khera, president of the Malaysian Oncological Society. "However, it's only suitable for early breast cancer patients."

A Kinder Cut

In 1997, after Katherine Teng of Singapore had a breast tumour removed, she had six weeks of radiation therapy and six months of chemotherapy before returning to her life as a senior marketing executive in January the following year. She thought the worst was over. But two years later she began to suffer a painful side effect of her treatment: Her right arm started swelling, eventually growing to two times its normal size. She became increasingly susceptible to serious infections. "I had to be very careful not to get any cuts or even a mosquito bite," Teng says. Once, she spent two weeks recovering at home after picking up an infection from dust mites. "I never thought that I would have such serious medical problems so long after the surgery."

Teng had a moderate case of lymphedema, not because of her cancer but because of a procedure doctors use to diagnose spreading cancer cells. When the surgeons cut out her tumour, they also took lymph nodes from her armpit. This step isn't undertaken lightly. After all, a tumour in the breast never killed anyone; breast cancer becomes deadly only when cells escape the tumour and launch themselves into the rest of the body. One escape route is provided by the lymph system, a fluid-filled highway for immune cells, oxygen, nutrients and cell waste. The lymph nodes trap bacteria and viruses so that white blood cells can kill them — that's why lymph nodes sometimes swell when a person has an infection. The nodes collect cancer cells as well; for many years, breast cancer surgery routinely included lymph node dissection, in which surgeons would remove 10 to 20 nodes from the network under the arm, cutting them away from surrounding nerves and sending them to the lab. If any cancer was found, it meant a whole-body treatment like chemotherapy was in order.

But all that cutting can seriously damage the system of tiny vessels that drains lymph fluid in the region, and radiation therapy can do further harm. The buildup and stagnation of fluid can cause minor numbness and swelling, or it can lead to great pain, dangerous infections and disability.

A new procedure may protect women from suffering the way Teng did. When Gwen Goyena of Manila

had a lumpectomy in July 2004, her surgeons took out the tumour along with just one sentinel lymph node and seven axillary lymph nodes in a procedure known as sentinel node biopsy. The approach is based on the realisation that lymph fluid travels in an orderly fashion from one node to the next; find the nodes that are first in line to drain the region, and these so-called sentinels will signal cancer's spread or give the all-clear.

Goyena went home from surgery with two small incisions – in her armpit and her breast – and without the drains that are needed after standard node dissection. She was prepared for pain, but there has been little.

"I did not take any pain medication," she says. She did experience a small amount of numbness in her right arm, but recovered completely after less than a month of rehabilitation. Goyena's nodes were found to be

cancer-free, and today, her life is back to normal.

Though the idea behind sentinel node biopsy is elegant, there are some things to keep in mind. First, while some surgeons in countries like Singapore, the Philippines and Hong Kong are doing the procedure, there is still a lack of trained surgeons in most parts of Asia. The skill and experience of the surgeon and other specialists are crucial for a good result, says Dr Diana Cua-Balcells, a breast cancer surgeon at Makati Medical Center in Manila. Research has shown that a sentinel biopsy can give a false negative – a finding of no cancer when it actually has spread to the nodes – as little as two per cent of the time, or as often as 30 per cent, depending upon the experience of the surgeon.

A surgeon – preferably one specialising in breast cancer – should have trained by doing at least 30 biopsies

Testing, Testing

The hope of quicker, less painful treatment thrills women, but unless breast cancer is caught early, the promise is hollow. Mammography is still the yearly test of choice for women over 40. And scientists are working hard to develop refinements, replacements or add-ons.

Sharper Pictures

Digital mammography uses X-rays but depends on sen-

sitive digital receptors to record the image. The picture has more gradations between its bright and dark areas than a conventional mammogram does, says radiologist Daniel Sullivan, chief of the biomedical imaging program at the National Cancer Institute, so it offers more information. A direct comparison with standard mammography in 50,000 women is

under way.

Two other imaging techniques also offer hope for better diagnoses: magnetic resonance imaging and ultrasound. These are well known, but are only now being studied as potential breast cancer screening tools. One big advantage is that they easily "see" through the dense breast tissue that can confound mammography.

Asian patients will soon be able to benefit from targeted radiation therapy

followed by axillary dissection to double-check his or her work before doing just the sentinel node biopsy. And the surgeon's false-negative rate should be less than five per cent. "Make sure the doctor has had sufficient training and is dealing with a significant number of breast cancer patients in their clinical practice," Dr Cua-Balcells says.

Starve the Tumour

In May 2001, Lynn Leong of Petaling Jaya, Malaysia, waited nervously in her doctor's office. Two weeks earlier, after her doctor discovered a soft lump the size of a small grape no more than five centimetres from her right armpit, surgeons had extracted a small tissue sample from the lump for testing.

Now she was about to get the re-

sults. "I am sorry to let you know that the tests showed that you have breast cancer that is prone to spread," her doctor told her.

Leong had a second operation to remove all cancerous cells 15 days later, then underwent seven months of chemotherapy and radiotherapy.

She was then put on a five-year course of tamoxifen, a drug known to help prevent a relapse. But two years later, she developed vaginal itch and a greenish yellow discharge. The doctor concluded that Leong had developed an intolerance to tamoxifen and switched her to a new anti-cancer drug called letrozole.

Three years into the five-year treatment, Leong's cancer is in remission. "At first I was worried of further side

Breast Cell Tests

In three types of tests, doctors gather cells from breast ducts, where most breast cancers arise, and examine them for precancerous or cancerous cells. The tests offer early detection, but ductal lavage and micro-endoscopy can't be called noninvasive since a doctor must snake a hair-thin catheter into ducts to

collect cells. Nipple fluid aspiration uses a device similar to a breast pump. Studies of the test are encouraging, but Sullivan worries that suspicious cells may be missed if it's in an inaccessible duct.

Saliva Samples

Researchers are investigating whether testing a woman's saliva (or perhaps her blood) can show

whether she has breast cancer or maybe see if cells that are abnormal are threatening to become cancerous. The approach is based on the fact that all cells secrete chemicals – and abnormal cells secrete different chemicals than normal cells do. Such a test is five to ten years away. LAURA DAVIS



effects when I changed to the new treatment, but I am feeling fine so far," she says.

In the fight against breast cancer, there are new drugs all the time. Each offers some small but significant improvement – a slightly better safety profile, say, or a tick downwards in the risk of recurrence. But a class of drugs called aromatase inhibitors, which include letrozole, may represent not just a step but a leap.

As you might guess, the drugs inhibit aromatase, an enzyme. Aromatase converts testosterone and related hormones into oestrogen.

A new class of drugs called aromatase inhibitors, which include letrozole, may represent not just a step but a leap

Block the enzyme and you block the manufacture of oestrogen.

Women think of oestrogen as the female hormone, and it is. But it can also be profoundly anti-female, acting as fuel to the 60 per cent of breast cancers that are oestrogen-sensitive. So one approach to breast cancer treatment has long been to kill the breast cancer cells by starving them of all oestrogen.

Breast cancer patients sometimes have their ovaries removed to reduce levels of the hormone. More often, they take tamoxifen, which does the job chemically, by blocking the cancer cells' docking site for oestrogen. Tamoxifen cuts a woman's chances of relapse by some 40 per cent, without causing the nausea, hair loss and ex-

haustion frequently experienced with chemotherapy drugs.

Research raises hope that aromatase inhibitors may significantly outperform tamoxifen, and become the preferred hormonal therapy for postmenopausal women.

The International Breast Cancer Study Group, which is made up of European breast cancer experts, examined the treatment of 8010 postmenopausal women recovering from breast cancer. The women who had taken letrozole for five years showed a 19 per cent lower risk of a relapse than those who were treated

with tamoxifen over the same period. A US study of anastrozole, another aromatase inhibitor, showed equally promising results.

"For the past 20 years or so, tamoxifen was the best hormonal treatment of both early and advanced metastatic breast cancer," according to Dr Cua-Balcells. "But now, aromatase inhibitors are considered to be more effective than tamoxifen."

It's not a sure bet. And the drugs' long-term safety still needs to be determined. "There are costs and side effects," says Dr Wong Nan Soon, a consultant medical oncologist at the National Cancer Centre Singapore. For instance, anastrozole seems more likely than tamoxifen to cause bone fractures and osteoporosis but less apt

You're Not Alone

Breast Cancer Support in Asia

If you've been diagnosed with breast cancer – you are not alone. There are many support groups across Asia that can introduce you to a network of women and medical professionals who can help you, and your family, deal with your prognosis.

Breast Cancer Foundation Singapore
www.bcf.org.sg

Philippine Breast Cancer Network
www.pbcn.or

Breast Cancer Awareness Campaign, Pakistan
www.pinkribbon.org.pk

Breast Cancer Welfare Association, Malaysia
www.radiologymalaysia.org/breasthealth/bcwaindex.htm

National Alliance of Breast Cancer Organisations
www.nabco.org

Hong Kong Cancer Fund - Pink Revolution
www.cancer-fund.org/pink



to trigger potentially deadly endometrial cancer and blood clots.

As cancer researchers wait for firmer answers, they're getting still more trials underway. Might another aromatase inhibitor be even better than letrozole or anastrozole? Since the aromatase inhibitors work differently than tamoxifen, could a woman get even more benefit by taking one after the other? For now, Dr Cua-Balcells says, aromatase inhibitors appear to have an early lead over the tamoxifen drug.

In America, the official survival rate for women with a tumour in the breast is 97 per cent, up from 72 per cent in the 1940s.

Asian cancer specialists admit that while the region can't match those promising numbers, the trend towards gentler and more potent treatments will definitely go a long way to closing, even eliminating, the gap. Says Dr Wong, "I am hopeful that with better access to early detection and new generation treatments, the trend in improved survival seen in US breast cancer patients will also be seen in Asia."

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October is Breast Cancer Awareness month. From Dragon Boating to medical seminars, there are activities planned across the region. To find out more – including how to do a proper self examination – visit rdasia.com



"I like the uncluttered simplicity of Olympus E-System cameras, and the precision optics are some of the finest I have ever used."

A flower-seller sets off into the morning mist on the still waters of Dal Lake in India's Kashmir province. Frozen in time by photographer John Isaac, it is a scene of simplicity and ageless beauty. To realize this vision, John used one of his favorite tools – an Olympus E-1 digital SLR camera, simply equipped with a ZUIKO DIGITAL 14-54mm F2.8-3.5 standard kit lens. Because John knows that our high-precision optics always live up to their reputation for excellence, and will deliver the flawless image quality he demands. At Olympus, "Your Vision, Our Future" is more than just a slogan. It's a heartfelt expression of our desire to help you fulfill your dreams.



As former head of the United Nations photo unit and winner of a PMDA Photographer of the Year award for lifetime dedication to humanitarian issues, John Isaac is an internationally respected photographer whose career spans more than three decades.



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