

Restore

Health and hope for patients and survivors WINTER 2011

What Is Chemo Brain?

It's more common — and less serious — than you might think

“Chemo brain” can include memory issues or difficulty paying attention.

After going through chemotherapy treatment, many people commiserate about a foggy-headed feeling that just doesn't seem to go away.

It's a phenomenon known by many patients as “chemo brain” or, as scientists refer to it, cancer-related cognitive dysfunction. It's the experience of undergoing a change in your cognitive ability linked to the diagnosis of cancer and its treatment, explains Sunita K. Patel, Ph.D., clinical

neuropsychologist and assistant professor at City of Hope.

The most common changes include memory issues, difficulty paying attention or reacting quickly, such as coming up with the right word during a conversation, and problems concentrating.

Bane of the Brain

According to Patel, the reason this phenomenon is labeled chemo brain is because it was first attributed to the effects of continued on next page

IN THIS ISSUE

Heads-Up on Prostate Cancer Risks

A Case of the Blues

Upcoming Events at City of Hope

ILLUSTRATION BY CHAD BAKER/GETTY

continued from previous page

chemotherapy drugs used to treat cancer. But, more recently, researchers have learned that about 20 to 30 percent of participants in studies that focused on cognitive dysfunction seem to have evidence of difficulties (on neurocognitive tests) after cancer diagnosis but prior to cancer treatments.

“Now the thinking is that it’s mainly due to the chemotherapy, but it may also be due to the cancer itself,” explains Patel. “Cancer has an effect on the immune system that leads to this chain reaction in the body, which can have an impact on the brain.”

The research continues, Patel adds, and there’s still much to learn. Some recent neuroimaging studies have shown visible changes in the brains of patients treated with chemotherapy. Areas of the brain that have to do with learning and memory seem to be the most affected, but the studies are still preliminary.

How to Cope

It’s important to note that patients with any type of cancer may experience forgetfulness and foggy thinking. But the good news is that the symptoms will disappear over time in most people.

“Cancer has an effect on the immune system... which can have an impact on the brain.”

Patel recommends adopting practical coping strategies until the issues go away. If you’re having trouble concentrating or remembering things, write everything down. Use memory aids like keeping your keys in the same place so you can always find them or using a calendar to track your appointments.

Also, allow extra time to accomplish your errands and tasks, especially while in chemotherapy. “Don’t become overwhelmed because you aren’t functioning at your best,” says Patel. “You’re still healing, so use common sense about how much you can manage.”

She adds that there’s no concrete evidence that activities like crossword puzzles can improve memory and concentration. However, healthy habits might help; Patel emphasizes the importance of good nutrition, regular physical activity and adequate sleep.

“Your first line of defense is to be as physically healthy as you can be,” she explains. “If you’re physically healthy, you’ll be more mentally able to handle cognitive tasks.”

Patel emphasizes that most cases of chemo brain aren’t severe. “The cognitive changes may feel substantial,” she says, “but they’re temporary and likely to be mild.”

She stresses that if patients continue to have cognitive difficulties after several months to a year following the end of their cancer treatments, they should speak to their doctor about getting a comprehensive neuropsychological evaluation.

— Amy Lynn Smith

Heads-Up on Prostate Cancer Risks

Research cannot explain why one man develops prostate cancer and another does not, but early balding may point to increased prostate cancer risk.

A study by French researchers of nearly 700 men found that men with prostate cancer were twice as likely as healthy men to have started losing their hair at age 20. The same correlation did not hold for men who began balding in their 30s or 40s.

Male-pattern balding is tied to changes in male hormones, and scientists have linked prostate cancer to male hormones as well. More studies are needed, but the researchers suggested that men who begin losing hair at a young age might benefit from earlier prostate screening.

The average age at diagnosis is 70, so experts suggest that most men talk with their doctor about screening starting around age 50. While there is no known exact cause of prostate cancer, researchers say that these factors may increase risk:

FAMILY HISTORY. A man’s risk is higher if his father, son or brother had prostate cancer before age 65. Many physicians suggest these men start regular screening in their early to mid-40s.

RACE. African-American men over age 40 have the highest rate of prostate cancer; physicians often suggest they also start getting tested in their early to mid-40s.

DIET. Some studies suggest that men who eat a lot of red meat or high-fat dairy products may be at increased risk, although these men also typically eat fewer vegetables, so more study is needed to understand the source of risk.

Talk to your doctor about ways to prevent prostate cancer and to plan checkups that are right for you.



A Case of the BLUES

Blueberries help in the fight against triple-negative breast cancer

The navy hue and delicious taste of blueberries is enticement enough to gobble a handful.

Now, City of Hope scientists have found another reason to love blueberries. Their lab research showed that the popular fruit may control tumor growth, block cancer's spread and induce cell death in a type of breast cancer that is hard to treat.

Triple-negative breast cancer cells frustrate physicians because they lack three key proteins that most standard, successful breast cancer therapies target. This makes triple-negative breast cancer tough to treat. About 15 percent of breast cancer patients have this type. And, unfortunately, they don't do as well overall as those with breast cancers having one or more of the target proteins.

Slowing Cells

Blueberries may succeed where current drugs struggle, according to Shiuian Chen, Ph.D., director of City of Hope's Division of Tumor Cell Biology. "We observed that blueberries help fight triple-negative breast cancers by suppressing pathways critical to tumor development and migration," he says.

Chen, former City of Hope researcher Lynn S. Adams,

Ph.D., and colleagues applied blueberry extracts to triple-negative breast cancer cells in the lab. They found that the extract slows the development of the cells as well as their ability to move around. Even better, the extract led to apoptosis, or cell death, at more than twice the rate seen in untreated cells.

The team found similar results when it gave blueberry powder to mice with triple-negative breast cancer. Tumors shrank significantly and cancer spread less in mice that ate the powder.

Taking a Deeper Look

The amount of blueberries fed to the mice was the equivalent of eating two cups of blueberries a day, he says, although more study is needed to confirm blueberries' effects in people.

"Our team is hopeful that future research will identify the specific compounds in the fruit responsible for this action, as well as further

investigating blueberries' potential to slow down the progression and spread of this difficult form of breast cancer," he says.

Chen and his colleagues are planning a human clinical trial to test blueberries' effect on breast cancer, in addition to research on anticancer properties of other fruits and vegetables. — *H. Chung So*



12/11-2/12

Unless noted, all classes and support groups meet at the Sheri & Les Biller Patient and Family Resource Center, City of Hope, 1500 E. Duarte Rd., Duarte, Calif. To sign up, call **626-256-4673, ext. 3CARE (32273)**. Full calendar listings can be found at www.cityofhope.org/patient_care/calendar. Class schedules are subject to change. To confirm, please call or email billerresourcecenter@coh.org.

EDUCATIONAL & HEALING ARTS PROGRAMS

Art Therapy

Tuesdays, 1:30–3 p.m.

For patients and caregivers. Preregistration is required. Discover your inner artist and express yourself through art. Explore drawing, collage, crafts and more. Art therapy can relieve stress and anxiety and increase physical and emotional well-being.

Breathing and Meditation Class

Thursdays, 1–2 p.m.

Hope Village activity room. Learn simple meditation and breath-

ing techniques to relieve stress and anxiety, enhance health and well-being, and promote a good-night's sleep.

Yoga Restaurador (Yoga in Spanish)

Wednesdays, 3:30–4:30 p.m.

Gentle Restorative Yoga (Evening)

Mondays, 3–4 p.m.;

Wednesdays, 7–8 p.m.

Hope Village activity room. For patients and caregivers. Preregistration is required. Course includes various yoga postures, development of daily home practice, and relaxation techniques.

Music Therapy

1st and 3rd Thursdays of each

month, 2:30–4 p.m.

For patients and caregivers. Pre-



registration is encouraged. Nourish your mind, body and soul with the healing power of music. Music therapy can relieve pain, physical discomfort, stress and anxiety.

Patient and Family Orientation

Tuesdays, Wednesdays and Thursdays, 11 a.m.–noon, noon–1 p.m. and 1–2 p.m.

Tackle your treatment with confidence! Learn valuable tips such as how to get the most out of your appointments, who to call when you need help, how to navigate City of Hope and where to find valuable resources that can make life easier for patients and families.

SUPPORT GROUPS

Breast Cancer Support Group

2nd Tuesday of each month, 6–7:30 p.m.

Preregistration is required.

Head & Neck Cancer Support Group

Next session to be announced.

Check the calendar listing at www.cityofhope.org/patient_care/calendar.

NAME YOUR CHAMPION

Honor a City of Hope health professional as a Champion of Hope. For details, call **800-667-5310** or email developmentrelations@coh.org.

Hope Network

Hope Network connects breast cancer patients and caregivers with peer volunteers whose similar experiences, diagnosis or treatment help them uniquely understand their situation. Breast cancer patients and caregivers can talk with one of the experienced peer volunteers by calling the Biller Resource Center or by emailing hopenetwork@coh.org.

Leukemia, Lymphoma & Multiple Myeloma Support Group

1st Thursday of each month: 6–7:30 p.m.

Conference Room Y-9.

Preregistration is required.

Lung Cancer Education for Patients

1st Wednesday of each month: 6–7:30 p.m.

Preregistration is preferred.

Women's Meeting for Gynecological Support Group

2nd Tuesday of each month: 4–5 p.m.

Contact Lennie Salmon, N.P.

626-471-9200 or email lsalmon@coh.org.



Smita Bhatia, M.D., M.P.H.
Medical Advisor

Alicia Di Rado
Publications Manager

Carol A. Chaplin
Publications Editor

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