

NEWSROUND

Selected press reports compiled by the ESO Cancer Media Centre

Drug can reduce hot flashes for women with breast cancer

→ The Lancet

A drug called gabapentin could reduce the incidence of hot flashes in women with breast cancer by 46%, according to a randomised trial published in the *Lancet*.

Hot flashes are a collection of symptoms including sweating, palpitations and anxiety. They are the most commonly reported symptoms in women receiving chemotherapy or hormone therapy for breast cancer. Treatment with oestrogen and progestagen can improve these symptoms. However, such hormone replacement therapy may increase the risk of breast cancer recurrence.

Gabapentin is an anticonvulsant drug that is often prescribed by doctors to treat epilepsy and control seizures. It has also shown potential for the treatment of bipolar disorder, anxiety disorders, and substance use disorders.

Researchers wanted to see if it could help alleviate the symptoms of hot flashes in cancer patients.

Kishan Pandya (University of Rochester Cancer Center, USA) and colleagues recruited 420 women with breast cancer who were having two or more hot flashes a day onto the study. Participants were randomly assigned to placebo, 300 mg/day gabapentin, or 900 mg/day gabapentin for 8 weeks. Each participant kept a self-report diary on hot flashes before and during treatment.

At 8 weeks, data were available for 347 patients. The percentage decrease in hot-flash severity score between baseline and 8 weeks treatment was 15% in the placebo group, 31% in the gabapentin 300 mg group and 46% in the gabapentin 900 mg group.

Pandya states: "We believe gabapentin [900 mg/day] can be added to the list of nonhormonal agents for the control of hot flashes in women with breast cancer, and the effects of doses higher than 900 mg/day merit further study."

■ Gabapentin for hot flashes in 420 women with breast cancer: a randomised double-blind placebo-controlled trial. KJ Pandya, GR Morrow, JA Roscoe, et al. *Lancet* 3–9 September, 366:818–824

Scientists develop screening method for pancreatic cancer

→ University of Liverpool

Scientists at the University of Liverpool have found a way of identifying families at high risk of pancreatic cancer. The team has developed a new way of testing for pancreatic cancer that will enable doctors to treat the disease at its earliest stages. They can also show how the risk of cancer for these patients will change with age.

The Liverpool-based study group known as EUROPAC (European Registry Of Hereditary Pancreatitis And Familial Pancreatic Cancer), working in collaboration with a similar group in Germany, has shown that familial pancreatic cancer develops at

an increasingly younger age as it is passed down generations – a phenomenon known as 'anticipation'.

In the largest study of its kind, the team surveyed 600 families with a history of pancreatic cancer and identified a subgroup of over 80 families whose lifetime risk of developing the cancer was 50%.

Bill Greenhalf, from the University's Division of Surgery and Oncology, said: "Of those families with the highest incidence of pancreatic cancer, we found that members developed the disease at a younger age in each generation. As well as giving important clues about the nature of the disease, this allows a more accurate estimate of the risk an individual faces of developing cancer in the short term so we can treat the cancer as soon as possible."

The team led by Greenhalf has developed a method of analysing pancreatic juice, taken from patients in families with a history of pancreatic cancer. By analysing DNA, scientists are able to identify specific genetic mutations that indicate the chances of a patient developing the disease in the short term, ranging from a 0.1% chance to a 90% certainty.

Greenhalf added: "Our research has provided strong evidence that anticipation and pancreatic juice analysis are the most effective means of screening for pancreatic cancer in families with a history of the disease. We intend to carry out further trials of these techniques and hope the results encourage more widespread adoption of these screening methods."

■ The research is published in two separate papers in the journals, *Gut* and *Gastroenterology*

Link found between euthanasia requests and depression

→ **Journal of Clinical Oncology**

A study from the Netherlands has found that cancer patients who are depressed are four times more likely to request euthanasia. The study published in the *Journal of Clinical Oncology* demonstrates a link between depressed mood and the number of terminally ill cancer patients who request euthanasia.

Traditionally, it is thought that patients request euthanasia or physician-assisted suicide because of the unbearable pain associated with terminal illness. However, this theory has not been proved by clinical studies. This latest report suggests that euthanasia is not always a carefully thought through, rational request.

The Dutch study was conducted on 138 cancer patients with a life expectancy of 3 months or less. Patients were asked to complete a self-screening questionnaire that measured depression and anxiety. The patients' moods were then evaluated according to their score.

Depressed patients were four times more likely to request euthanasia than those without depression. Of 138 patients, 32 patients were depressed and 30 patients (22%) made an explicit request for euthanasia. The data collected also showed that patients' depression was not the consequence of a poorer prognosis.

The problems of treating depressed patients with terminal illness needs further consideration. Oncologists are often unsure how to treat depression, as Ezekiel J Emanuel points out in an accompanying editorial. "In general, physicians are poor at suspecting, identifying and diagnosing depression. Indeed oncologists themselves recognize that diagnosing and treating depression is not one of their better clinical skills."

Further investigation is needed to see whether depression can be adequately

treated in terminally ill cancer patients and if so whether it would lower the incidence of requests for euthanasia.

■ Euthanasia and depression: A prospective cohort study among terminally ill cancer patients. ML van der Lee, JG van der Bom, NB Swarte, et al. *JCO* 20 September, 27:6607-6612

New technique is better at clearing indwelling ports and lessening morbidity in cancer patients

→ **ECCO**

The use of normal saline solution and a technique that relies on positive pressure is more effective at cleaning indwelling ports than heparinised solution according to a new study presented at the European Cancer Conference.

Cancer patients are often fitted with a port, which is used to give continuous or weekly intermittent infusions of chemotherapy drugs. In order to keep the vein available for multiple access, the port is usually washed out with heparinised solution. However the drug does not always work and can block and close up the vein. On top of this, not all hospitals allow nurses to handle the drug heparin, and incorrect doses to patients can cause thinning of the blood.

The study conducted at the European Institute of Oncology in Milan discovered that using a simple saline solution and a technique called 'positive pressure' gave much better results than the traditional heparinised solution. The positive pressure approach is a simple technique that causes a slight vacuum and increases pressure inside the tube. The saline solution is obviously a lot less toxic than using a drug to carry out the same process.

The study looked at nearly 200 patients aged 18 and over with solid tumours. Each time they visited the clinic for treatment, the same procedure was used, and a total of 1,935 episodes were

annotated. The nurses were taught how to wash the port with 20 ml saline solution and had to maintain positive pressure during the procedure. Almost all patients (99%) experienced normal functioning of the port – a better result than using heparinised solution. Only one patient of 157 showed two consecutive partial occlusions. Hospitals should now be looking at implementing this procedure, which is less toxic for patients, less expensive for the hospital and easier for community nurses to maintain.

■ Positive pressure and normal saline instead of heparinized solution when washing indwelling ports in patients with cancer. Presented by Alessandra Milani at ECCO 2005

Radiotherapy after surgery is best option for prostate cancer patients

→ **The Lancet**

Giving prostate cancer patients radiotherapy after surgery could help prevent the progression of their disease, concludes an article in the *Lancet*.

When cancer is confined to the prostate, removal of the organ can successfully control the disease. However, for patients with cancer extending beyond the prostate, the risk of recurrence after surgery can be 10–50%. Michel Bolla (CHUA Michallon, Grenoble, France) and colleagues tested whether immediate radiotherapy after surgical removal of the prostate (prostatectomy) improved progression-free survival for patients at risk of relapse. Between 1992 and 2001, the investigators recruited 1,000 patients who had undergone radical prostatectomy from 37 centres in Europe. Half were assigned to radiotherapy after surgery and half to monitoring. After a 5-year follow-up, the researchers found that 74% of patients in the radiotherapy group had biochemical progression-free survival compared with 53% in the monitored group.

Biochemical progression-free survival refers to the patient's concentration of PSA. The investigators also found that clinical progression-free survival was significantly improved in the radiotherapy group.

Bolla concludes: "Our results show significant improvement in biochemical progression-free survival with immediate postoperative irradiation. Long-term follow up is needed to assess if postoperative irradiation affects the occurrence of distant metastases, survival, or both."

In an accompanying comment, Stefan Hocht (Charité University Hospital, Berlin, Germany) states: "Michel Bolla and colleagues report on a large study from the European Organisation for Research and Treatment of Cancer (EORTC) that is likely to change patterns of care in locally advanced prostate cancer . . . although the superiority of adjuvant radiotherapy is to be expected, we did not have direct proof of this hypothesis. The question still to be answered is whether adjuvant irradiation is superior to early salvage treatment as soon as prostate-specific antigen rises."

■ Postoperative radiotherapy after radical prostatectomy: a randomised controlled trial (EORTC trial 22911). Michel Bolla, Hein van Poppel, Laurence Collette, et al. *Lancet* 13–19 August, 366:572–578

Survival rates of black women may be affected by other diseases

→ JAMA

Black breast cancer patients may have shorter survival rates than white patients because of higher rates of other diseases, such as diabetes and hypertension, according to a study in a recent issue of JAMA.

Although breast cancer survival has improved over the last 30 years, differences in breast cancer survival between black and white women have not declined and remain sizeable. Several causes have been identified,

such as advanced cancer stage, lack of access to medical care, inferior treatment, and lower socioeconomic status; however this disparity still remains unexplained.

Scientists from Canada looked at the records of over 900 women who had been diagnosed with breast cancer between 1985 and 1990. The results showed that black breast cancer patients have more cancer recurrence/progression and shorter overall survival. Overall, 62% of black women died compared to 50% of white women.

Over 62% of all deaths were attributed to competing causes. Proportionally more black women than white died of competing causes. In 86% of black women, one or more comorbidities were reported compared to 66% of white women. A total of 77 adverse comorbidities were associated with reduced survival. Diabetes and hypertension were particularly important in explaining the survival gap. However comorbidity was not associated with recurrence/ progression or breast cancer-specific survival.

The results indicate more black breast cancer patients die of competing causes than of breast cancer. Effective control of comorbidity in black breast cancer patients should help improve life expectancy and lead to a reduction in the survival rate gap.

■ Comorbidity and survival disparities among black and white patients with breast cancer. CM Tammemagi, D Nerenz, C Neslund-Dudas, et al. *JAMA* 12 October, 294:1765–1772

Chemotherapy regimen may help preserve limbs in 90% of young people with osteosarcoma

→ Journal of Clinical Oncology

A new study has found that high doses of chemotherapy may improve a patient's chance of preserving a limb with osteosarcoma. The joint findings by the Italian and Scandinavian sarcoma groups will be published in the *Journal of Clinical Oncology*.

Osteosarcoma is the most common type of bone cancer, and the sixth most common type of cancer in children. Patients are usually given a course of chemotherapy before surgery or radiotherapy to shrink the tumour and make it easier to remove. The study followed 182 patients from March 1997 to September 2000 with localised osteosarcoma of the extremity. They were given a mix of chemotherapy treatments before and after surgery.

Initial chemotherapy consisted of two blocks of high-dose ifosfamide, methotrexate, cisplatin and doxorubicin. After surgery the patients received two cycles of doxorubicin, and three cycles each of high-dose ifosfamide, methotrexate and cisplatin. Granulocyte colony-stimulating factor support was mandatory after the high-dose ifosfamide/cisplatin/doxorubicin combination.

The study found that no disease progression was recorded during primary chemotherapy, and 92% of patients underwent limb-salvage surgery. With a median follow-up of 55 months, the 5-year probability of event-free survival was 64% and overall survival was 77%, whereas seven patients (4%) experienced local recurrence.

The study concluded that although the addition of high-dose ifosfamide to methotrexate, cisplatin and doxorubicin before surgery is feasible, there were major renal and haematologic toxicities. The survival rates were similar to those obtained with four-drug regimens using standard-dose ifosfamide. So it appears there is little advantage in using the higher doses. However the study showed that in a multi-centre setting, more than 90% of patients with osteosarcoma of the extremity can undergo conservative surgery.

■ Neoadjuvant chemotherapy with high-dose ifosfamide, high-dose methotrexate, cisplatin, and doxorubicin for patients with localized osteosarcoma of the extremity: A joint study by the Italian and Scandinavian Sarcoma Groups. S Ferrari, S Smeland, M Mercuri, et al. *JCO* 10.1200/JCO.2004.00.5785, published online 24 October