Transdermal testosterone does not improve libido

Transdermal testosterone treatment does not benefit oestrogen-depleted female cancer survivors with reduced libido, according to new research (*J Natl Cancer Inst* 2007; **99:** 672–79).

The researchers did a randomised placebo-controlled cross-over clinical trial in 150 postmenopausal cancer survivors with reduced libido. The patients were stratified by age, use of antidepressants, tamoxifen, or selective oestrogen-receptor modulators, and by presence of one intact ovary. The randomly assigned groups were given either 10 mg/day of 2% testosterone in vanicream or 10 mg/day of plain vanicream for the first 4 weeks and were then crossed over for the second 4 weeks.

Testosterone does not increase sexual desire in oestrogen-depleted women

The treatment resulted in a significant increase in mean bioavailable testosterone levels from baseline in participants who received active testosterone during the first 4 weeks compared with those who received placebo (11·57% *vs* 0%, respectively; 95% CI 8·49–14·65%; p<0·001), as well as during the second 4 weeks (10·21% *vs* 0·28%, 5·42–11·42%; p<0·001). However, this increase did not produce a significant improvement in sexual desire in testosterone-treated women compared with the placebo group in both periods, which was assessed by changes in the combined desire subscales of the Sexual Functioning Questionnaire from baseline.

"Transdermal testosterone had been shown in female populations without cancer to be helpful for libido. However, evidence-based interventions were lacking for female cancer survivors. We therefore tested if testosterone would be of help to cancer survivors" says author Debra L Barton (Mayo Clinic College of Medicine, Rochester, MN, USA).

"It seems a good study but the results are contrary to my experience and views. There is overwhelming evidence available for giving testosterone together with estradiol [to] women who have had a hysterectomy and bilateral salpingoophorectomy for cancer and even [to] those who have lost ovarian function because of chemotherapy", comments John Studd (Imperial college and Lister Hospital, London, UK).

Kaushal Raj Pandey

New option for locally advanced breast cancer?

Patients with locally advanced breast cancer (LABC) could benefit from a neoadjuvant epirubicin, cisplatin, and capecitabine (EXC) regimen, according to a new study (*Eur J Cancer* 2007; **43:** 1153–60).

"We evaluated the clinical efficacy… of…capecitabine and…cisplatin, which is seldom used in breast cancer treatment, together with epirubicin, a standard drug in breast cancer", says lead author Kenneth Villman (Department of Oncology, Örebro University Hospital, Örebro, Sweden).

A total of 48 women with LABC were included in this phase II study that was carried out at ten Oncology Departments in Sweden. The patients received EXC in 3-week cycles for 9 weeks, and then underwent modified radical mastectomy. Postoperatively, two more cycles of EXC were given. Postoperative radiotherapy was administered according to local guidelines. All patients with hormone-receptor-positive breast cancer received tamoxifen for 5 years.

The researchers also assessed the role of several biomarkers (ERBB2, topoisomerase IIα, thymidine phosphorylase, thymidylate synthase, and dihydropyrimidine dehydrogenase) in these patients. However, none of these markers predicted response in this group of patients.

46 patients completed at least two cycles of chemotherapy, with a response rate of 74% (95% CI 59–86), including complete responses in 13% (5–26%). Five patients of those treated with EXC could not undergo surgery and, instead, were given radiotherapy or another type of chemotherapy; therefore, these patients were not evaluable for histopathological response. With nine patients showing pathological complete response (pCR), pCR was 19% (9–33%) in the intention-to-treat group and 22% (11–38%) in the EXC-treated group that underwent surgery. During a median follow-up of 35 months' disease recurrence occurred in nine patients. Only one patient with pCR showed recurrence (p=0·39).

Treatment-related haematological toxic effects were manageable. However, nausea, vomiting and coagulation disorders were problematic and prompted discontinuation of treatment in six patients.

"The EXC combination [could] be a valid alternative in this difficult-to-treat group…if [these] results [are] validated in large future studies", says Judith Hurley (Sylvester Cancer Center, University of Miami, FL, USA). The high frequency of coagulation disorders is striking and must be carefully monitored in future studies with this drug combination, she cautions.

Sharan Prakash Sharma