ITALY

Breast Cancer Risk Revealed by K:Na Ratio of Cyst Fluid

The increased risk of breast cancer of women with breast cysts is concentrated among women with a cationic content of cyst fluid with a ratio of potassium:sodium of >1.5 (type 1 cysts), Italian researchers have found.

They studied 802 women with aspirated breast cysts. After median follow-up of 6 years, 15 cases of invasive breast cancer and two ductal carcinomas *in situ* were diagnosed in the cohort: 12 invasive cancers (and two carcinomas *in situ*) among the 417 women with type I cysts, two cancers among the 325 women with type II cysts (potassium:sodium of <1.5), and one among the 60 women with mixed cysts. The incidence of breast cancer in women with type I cysts was significantly higher than that in women with type II cysts (relative risk 4.92; 95%CI 1.26–29.7).

Bruzzi P, Dogliotti L, Naldoni C, et al. Cohort study of association of risk of breast cancer with cyst type in women with gross cystic disease of the breast. British Medical Journal 1997, 314:925–928.

UK

Portal Vein Infusion Saves 5%

Portal vein infusion of cytotoxic drugs may improve survival by about 5%, a meta-analysis of 4 000 patients in 10 studies shows. If these results are confirmed, then portal vein infusion may prevent 1 000 deaths from bowel cancer a year in the U.K.

The use of portal vein infusion of cytotoxic drugs was explored as a means of increasing drug levels in the liver, the most common site of spread in bowel cancer.

Professor Richard Gray, one of the organisers of the review group, explained: "The first study was remarkably promising and the other nine studies were set up to confirm these initial findings. None of these studies could do so on their own, but when we put all the results together it looked as if PVI could improve survival by about 5%. Even if this treatment were only moderately effective, its widespread use could prevent about a thousand deaths a year in the U.K. alone, and over 10,000 deaths worldwide."

"However, an even larger study is needed to find out just how effective it is."

Researchers are now undertaking the biggest study of cancer treatment in China in order to confirm these results.

Dr Zhengming Chen, the study organiser in China says, "China is an ideal place to carry out such a study because it has such a big population and our collaborative group in China can carry out trials involving large numbers of people." He added, "More than 10,000 bowel cancer patients are taking part in this study. This means that we should be able to define once and for all what the real benefits of PVI are."