

News

Lung Cancer

The 2nd European Inter-University Symposium on advances in the diagnosis and treatment of lung cancer will be held on 23–26 September 1992, in Naoussa, Greece. For further details, contact Professor Paul Vritsios, Radiation Oncology Department, AHEPHAN'S University Hospital, 1 S. Kyriakidi St, GR 54636, Thessaloniki, Greece. Tel: (31) 994110, Fax: (31) 206940 and (31) 225666.

Mutant Oncogenes

A meeting on mutant oncogenes entitled Targets for Therapy will take place on 22–23 October 1992, in central London. For further details, contact Miss Ruth Parks, Department of Clinical Oncology, Hammersmith Hospital, Du Cane Road, London, W12 0HS. Tel: 081 7403149, Fax: 081 7462021.

AACR Special Conferences

The American Association for Cancer Research is holding three special conferences in cancer research in 1992. First, on 23–26

September in Naples, Florida, there is a conference on molecular and biochemical methods in epidemiology and prevention. The second meeting is on normal and neoplastic growth and development in Cape Cod, Massachusetts, on 18–22 October. The third conference is on the genetics of cancer, and will be held on 4–8 November in Hilton Head, South Carolina. Further details for all three can be obtained from AACR, Public Ledger Building Suite 816, 620 Chestnut Street, Philadelphia, Pennsylvania 19106-3483, USA. Tel: 215 440 9300, Fax: 215 440 9313.

Radiation Biology and Hyperthermic Oncology

A joint meeting of the European Societies for Radiation Biology and Hyperthermic Oncology will be held in Amsterdam on 1–4 June 1994. For further information, contact Clemens Walta or Jacqueline Rohof, PAOG Amsterdam (Conference Secretariat), Tafelbergweg 25, 1105 BC Amsterdam, The Netherlands. Tel: (20) 5664801, Fax: (20) 6963228.

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Letters

Hepatitis due to Cyproterone Acetate

**Pavlos E. Drakos, Eliahu Gez
and Raphael Catane**

CYPROTERONE ACETATE (CPA) is widely used for female hirsutism, precocious puberty, acne and carcinoma of the prostate and breast, with minimal side-effects [1–3]. Only a few reports have been published about clinical hepatocellular damage due to CPA [4–9].

A 78-year-old man was admitted on 9 May 1990 for jaundice. Two years earlier he underwent simple prostatectomy because of prostatic hypertrophy although pathological examination showed focus of a well differentiated prostatic adenocarcinoma (stage A₁). In February 1990, because of metastases, he was offered CPA 50 mg orally three times per day and triptorelin 3.2 mg intramuscularly every month. Liver function tests were then normal. Treatment induced subjective and objective

responses. On 9 May 1990, jaundice and fatigue appeared. Physical examination was unremarkable. Total bilirubin was 491 $\mu\text{mol/l}$ (direct 284), alkaline phosphatase 246 U, aspartate transaminase 665 U and alanine transaminase 468 U. Prothrombin time was 55% of normal. Ultrasonography and computerised tomography of the abdomen revealed only minimal ascites with a normal size, homogenous liver. Serological markers for hepatitis viruses, cytomegalovirus and herpes viruses were negative.

CPA was stopped while triptorelin was continued. The patient gradually recovered and liver function became normal within 3 months (Fig. 1).

CPA was implicated in our case since there was no other cause for the hepatocellular damage. In addition, withdrawal of CPA resulted in resolution of the abnormal liver function.

Thus, 18 cases of patients with liver damage due to CPA have been reported and in 3 patients the outcome was fatal (17%) [4–9]. The mechanism by which CPA induces liver damage is not clear but several hormone agents can be hepatotoxic [10]. Most of the cases described occurred in elderly patients with malignant disease who received CPA for a long period. Monitoring of liver function in patients receiving CPA may allow early detection of liver enzyme abnormalities and prompt withdrawal of the drug.

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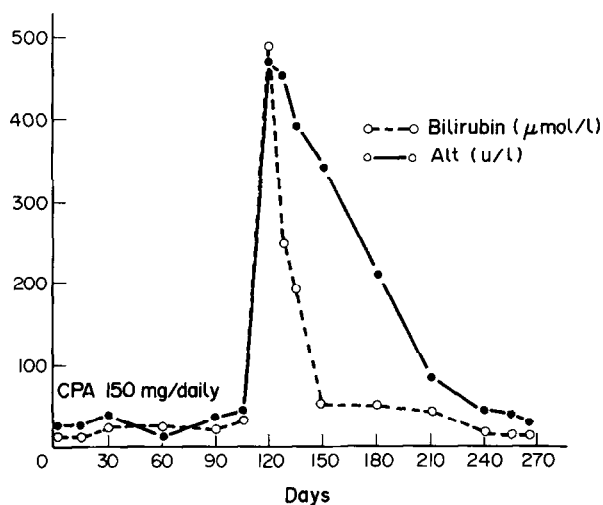


Fig. 1.

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Ductal Carcinoma *in situ*

Gilbert A. Lawrence

DUCTAL CARCINOMA *in situ* (1992) **28**, 630–634. While Silverstein *et al.*'s study is not randomised and the patients in the three

treatment groups (mastectomy, lumpectomy and radiation and lumpectomy alone) are not comparable, the report permits evaluation of the natural behaviour of the disease and its response to various modalities.

Small ductal carcinomas *in situ* (DCIS) were treated by lumpectomy alone. I am not aware of any study correlating the size of the tumour to multicentricity. In this and other series, the frequency of multifocal disease in the mastectomy specimen was 35–50%, and that of multicentric disease was 15–35%. Hence, lumpectomy alone may not be optimum. DCIS thus treated will most likely have the same recurrence rate as invasive cancer treated similarly. In the NSABP randomised study B-06, that rate was 40% [1]. Silverstein *et al.*'s study has an 8% local recurrence rate with a median follow-up of only 19 months.

The actuarial local recurrence rate following lumpectomy and radiation at 7 years was 10%. Half the failures were invasive, hence the risk of invasive cancer in DCIS patients treated with breast preservation (lumpectomy and radiation) is 5%. This is less than the risk of invasive breast cancer in US women (12–15%). The same risk applies to the contralateral breast in women with DCIS. Radiobiologists may question the 'recurrence' of DCIS as being irradiated normal cells or non-viable tumour cells. The difficulty in interpretation and lack of significance of abnormal or positive biopsy specimens following radiation is documented in pap smears for cancer of the cervix, and after random biopsies in prostate cancer [2].

Granted that the distinction between viable and non-viable tumour cells is difficult and it may be best to do 'salvage mastectomy', 90% of patients with DCIS treated by lumpectomy and radiation have their breasts preserved, compared with none of the group treated with the alternative option of initial mastectomy. Both groups had the same ultimate disease-free survival and overall survival at 7 years.

The risk of invasive cancer (5%) and death from the cancer (1%), in DCIS patients treated with lumpectomy and radiation needs to be placed in context. Of course, a patient can always be coaxed into a particular decision. In the general population, the risk of invasive breast cancer is 12–15%; half the patients die from the disease. Silverstein *et al.*'s recommendation of mastectomy is more prophylactic to prevent invasive cancer, than therapeutic for the DCIS. Hence, based on statistical risk, all women over 60 should be recommended for mastectomy.

A prophylactic basis for extirpative surgery could be used for many other cancers and diseases. Furthermore, as the study demonstrated, even with experienced, sub-speciality oncological surgeons, a prophylactic mastectomy does not eliminate the risk of invasive breast cancer in the ipsilateral chest wall.

Neither extreme, lumpectomy or bilateral mastectomy is optimum treatment. This may be even more important in a disease with a low malignant potential. The availability of increasingly higher resolution mammography units can give a clinician significant information and/or lead-time.

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