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ABSTRACTS IN CARDIOLOGY

Cardiotoxicity and cholesterol

The direct cardiotoxic effect of anthracycline (daunorubicin, doxorubicin, and epirubicin) chemotherapy is well known. Cardiotoxicity is sometimes apparent during treatment but may first present as a dilated cardiomyopathy years after completion of treatment and apparent oncological cure. Radiation treatment may also be associated with myocardial and pericardial disease which may be of very delayed onset. Raghavan *et al* report an absolute increase in serum cholesterol concentrations in 14 of 17 men treated with

cisplatin combination chemotherapy for germ cell tumours. This finding accords with an earlier retrospective analysis of similar patients by the same workers. The exact cause of the cholesterol rise is obscure. Long-term follow up will be necessary to assess whether accelerated atherosclerosis may need to be added to the steadily increasing list of late cardiovascular effects of tumour treatment.

KAREN McLEOD

Hypercholesterolaemia after chemotherapy for testis cancer

Derk Raghavan, Keith Cox, Annabel Childs, John Grygiel, David Sullivan

Purpose—The study was designed to determine prospectively the prevalence of fasting serum lipid abnormalities in patients who were treated with cisplatin-based chemotherapy for germ cell tumours. We unexpectedly had demonstrated hypercholesterolaemia in 20 of 30 nonfasting patients in a prior study of long-term toxicity of chemotherapy for germ cell tumours. The present study was designed to explore this phenomenon further.

Patients and methods—17 unselected patients with biopsy-proven germ cell tumours, who underwent cisplatin-based chemotherapy and who had no prior history of cardiac disease nor known hypercholesterolaemia, were studied. In addition to the standard staging tests, blood was drawn for a pretreatment fasting lipid screen, which included cholesterol, triglycerides, high-density lipoprotein (HDL) cholesterol, and apolipoproteins A1, B and (a). Repeat samples were drawn 24 hours after the administration of cis-

platin and at intervals of 6 to 24 months after the completion of treatment.

Results—Seven of 17 patients (41%) had higher than desirable levels of total serum cholesterol and low-density lipoprotein cholesterol. Two of them had normal levels before treatment, four had preexisting hypercholesterolaemia that increased further, and one patient had an elevated pretreatment level that did not alter. Absolute increases in serum cholesterol were noted in 14 of 17 patients. No consistent patterns of change beyond the reference ranges were found for other serum lipids.

Conclusions—We have confirmed our initial observation that serum cholesterol increases in patients who received cisplatin-containing chemotherapy regimens for germ cell tumours. Further studies will be necessary to define whether other lipid abnormalities occur and the biological significance of these findings. (*J Clin Oncol* 1992;10:1386-9.)