

both preclinical and clinical levels; it has also purchased the necessary equipment for these courses and sponsored the production of a teaching video. We suggest further that policy guidelines for hospital cardiopulmonary resuscitation should be set up, ideally identical with the Resuscitation Council (UK) guidelines. An officer working within the hospital should be designated as responsible for training and standardisation of basic and advanced life support programmes. These should be taught at the beginning and end of the clinical years and, most important, examined both theoretically and practically. We find that for a group of eight students this takes three hours for each session—a total of six hours in a course lasting four and a half to five and a half years: surely not a high price to pay?

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- 1 Lowenstein SR, Libby LS, Mountain RD, Hansbrough JF, Hill DM, Scoggin CH. Cardiopulmonary resuscitation by medical and surgical house officers. *Lancet* 1981;iii:679-81.
- 2 Casey WF. Cardiopulmonary resuscitation: a survey of standards among junior hospital doctors. *J R Soc Med* 1984;77:921-4.
- 3 Standards and guidelines for cardiopulmonary resuscitation (CPR) and emergency cardiac care (ECC). Part IV. Advanced cardiac life support. *JAMA* 1980;244:479-94.
- 4 Corday E, Dodge HT. Symposium on identification and management of the candidate for sudden cardiac death. *Am J Cardiol* 1977;39:813-5.
- 5 Vincent R, Martin B, Williams G, Quinn E, Robertson G, Chamberlain DA. A community training scheme in cardiopulmonary resuscitation. *Br Med J* 1984;288:617-20.

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Delay in diagnosing testicular tumours

Testicular cancer accounts for about 1% of cancers among men and is increasing in incidence. It is potentially curable, even in the advanced state, because of effective chemotherapy. The efficacy of treatment, however, is dependent on stage and bulk of metastases,¹ and delays in diagnosis affect stage and therefore prognosis.² Delay may be attributable to the patient, the general practitioner, or the hospital. We undertook a retrospective study to measure these delays so that possible remedies could be made.

Patients, methods, and results

We obtained from the Yorkshire Regional Cancer Registry a list of patients with testicular cancer who had been operated on by consultant surgical members of the Yorkshire Urological Cancer Research Group from 1976 to 1982. A questionnaire was completed for each patient. Of the 139 cases identified, 132 questionnaires were returned. Eleven were rejected as not having primary testicular tumours, leaving 60 seminomas and 61 teratomas. The Royal Marsden Hospital staging system was used to stage the tumours.³

The principal delay in diagnosis was attributable to the patient (see table). Although some patients sought advice immediately, most waited, some as long as two to three years. Most patients were referred immediately by their

general practitioners, but in seven delay was more than two months and in two more than six months. The majority attended hospital within four weeks, but 4% waited two or more months: these delays may have been caused by insufficiently explicit referral letters. Orchidectomy was performed fairly quickly, but 10% waited four or more weeks for the operation. There was virtually no difference in the delays for the two types of tumour. The longer the total delay, however, the greater the proportion of higher stage patients in both histological groups, particularly among patients with teratoma.

Comment

Occasionally patients present with metastatic disease without testicular symptoms. Some change in testicular size or consistency, however, is usually noted by the patient or his partner. It is often the partner who insists that advice is sought about signs or symptoms that the patient may be prepared to ignore or is embarrassed about. Young men have little knowledge of testicular cancer. In North America Cummings *et al* advocated public education programmes for highschool children and that testicular self examination should be taught.⁴ Testicular self examination led to the early diagnosis of one case after the patient saw a film on the technique.⁵

It is difficult to know how this subject could be best approached in the United Kingdom. Undue concern about this rare condition is undesirable. The problem is how to impart the necessary information in a tasteful and sensitive way to all men at a relatively early age, without causing alarm or offence. Doctors performed well in this series, but this topic needs to be emphasised during general practitioner training schemes and postgraduate courses if standards are to improve. Patients with testicular swellings should be referred urgently to hospital, and the appropriate action undertaken speedily. Blood for serum tumour markers (β human chorionic gonadotrophin and α fetoprotein) should be taken in all cases of testicular swelling at the earliest opportunity.

The prognosis and the amount of treatment required for testicular cancer are both related to stage at presentation. Cure rates could be improved and morbidity decreased (less treatment required) if patients were diagnosed earlier. This will only be possible if both patients and doctors are alerted to this fact.

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- 1 MRC Working Party on Testicular Tumours. Prognostic factors in advanced non-seminomatous germ cell testicular tumours: results of a multi-centre study. *Lancet* 1985;i:8-11.
- 2 Bosl GL, Goldman A, Vogelzang NJ, *et al*. Impact of delay in diagnosis on clinical stage of testicular cancer. *Lancet* 1981;iii:970-3.
- 3 Peckham MJ, McElwain TJ, Barrett A, Hendry WF. Combined management of teratoma of the testis. *Lancet* 1979;ii:267-9.
- 4 Cummings KM, Lampone D, Mettlin C, Pontes JE. What young men know about testicular cancer. *Prev Med* 1983;12:326-30.
- 5 Garnick MB, Mayer RJ, Ritchie JP. Testicular self examination. *N Engl J Med* 1980;302:297.

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Details of delays experienced by patients with teratomas and seminomas

Time periods in weeks	Teratoma (n = 61)			Seminoma (n = 60)		
	Mean	Median	Range	Mean	Median	Range
1st symptom to 1st medical advice	14.28	5	0-155	14.4	5	0-104
1st general practice attendance to referral letter	2.56	0	0-42	0.93	0	0-10
Date of referral letter to 1st hospital attendance	1.08	0	0-5	2.53	1.5	0-18
1st hospital attendance to orchidectomy	1.66	1	0-22	2.12	1	0-29