Benign testicular tumours

Traditionally some 95% of solid testicular swellings are held to be benign. Nevertheless, it has been suggested that benign testicular tumours may be more common than suspected, most of the patients reported having had granulomatous orchitis, tuberculosis, or epididymoid cysts. Is it really possible, then, to differentiate benign testicular swellings from malignant tumours preoperatively and avoid orchidec- tomy for benign disease?

Several features may raise the clinical suspicion of testicular malignancy. Three quarters of testicular cancers occur in those aged between 20 and 49; almost a tenth occur in undescended testes, even after orchidopexy14; and one in 20 occur in patients who have a contralateral tumour.14 Testicular tumours are also commoner in patients who are infertile or have gonadal dysgenesis.16 Clinical investigations may not help in determining the nature of a solid swelling. Scrotal ultrasound is at least 80% accurate in showing the site of origin of a swelling in the scrotum but may not reliably tell us whether a swelling is malignant even if the testicular architecture is abnormal. Though raised concentrations of tumour markers in the serum (such as α fetoprotein and β human chorionic gonadotrophin) suggest neoplasia, normal values do not exclude it.

Most surgeons have condemned needle biopsy of solid scrotal swellings because of the risk of tumour implantation.10 Usually the surgeon has to decide the fate of the tests at operation. All solid scrotal swellings in which malignancy cannot be excluded should be explored through an inguinal incision and the spermatic cord temporarily occluded before mobilisation of the tests: exploration through the scrotum is justified only if there is no suspicion of malignancy.10 Between a quarter and a third of testicular tumours are erroneously explored through the scrotum, with the result that the inguinal, perineal, and pelvic regions may become infiltrated by a tumour, a development that is incurable with conventional treatment.10

Operative biopsy of the tests may also be unhelpful because of “sampling error,” in which the tumour is not accessed; indeed, benign lesions may coexist in the tests with unrecognised malignant areas.11 Even splitting the tests into two (Chavassu’s manoeuvre) may not help in identifying a benign tumour, though the procedure is useful when exploring a solitary testis.11 The only totally reliable method of excluding malignancy is to examine the entire testis histologically and this requires orchidec- tomy. Some urologists have gone on record as saying that orchidec- tomy is mandatory for all suspicious scrotal swellings and that there is no place for biopsy.13

Hence there is no reliable way to determine whether an intratesticular lesion is benign and can be enucleated without orchidec- tomy. The current trend towards improved screening and self examination of the genitalia means that surgeons will be faced with increasing numbers of undiagnosed scrotal swellings.12 Most of these patients will rightly be treated with inguinal orchidec- tomy, and inevitably testes will continue to be removed for benign disease. Some would regard this as a crime; the greater crime, however, is to leave behind a scrotal scar and a testis containing a malignant tumour.

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