A one-stop clinic for men with testicular anxiety

JAMES A MOORE, CATHY O'NEIL, DEREK FAWCETT

Harold Hopkins Department of Urology, Royal Berkshire NHS Foundation Trust, Reading, UK

ABSTRACT

INTRODUCTION Testicular lumps and orchalgia both cause considerable anxiety, usually related to concerns about possible cancer.

PATIENTS AND METHODS We established a rapid-access testicular clinic staffed by a urologist and a specialist ultrasonographer in order to delay the time to a definitive diagnosis.

RESULTS Over a 30-month period, 845 men underwent clinical examination and scrotal ultrasonography. Overall, 4% of men were found to have testicular cancer. The majority of men were found to have normal testes or minor abnormalities and could be re-assured.

CONCLUSIONS This one-stop clinic reduces the time to a definitive diagnosis which may reduce anxiety suffered by men with testicular complaints and allows rapid identification of those harbouring a testicular malignancy.

KEYWORDS

Testes – Ultrasound – Carcinoma – Orchalgia

CORRESPONDENCE TO

James A Moore, Harold Hopkins Department of Urology, Royal Berkshire NHS Foundation Trust, London Road, Reading RG1 5AN, UK
E: james@jamesashleymoore.com

Although the incidence seems to be increasing, testicular cancer remains an uncommon condition, with 1885 new cases occurring in the UK in 2003.¹ Public education has significantly increased the awareness of testicular cancer in men and emphasised the importance of regular testicular self-examination.² It may be a consequence of this education that secondary referral of men with scrotal abnormalities appears to be increasing. Although the majority of scrotal abnormalities are found to be benign, the discovery of a lump in the scrotum causes significant anxiety to men until they have the re-assurance of a urological opinion, perhaps supported by scrotal ultrasonography. Similar anxiety is suffered by men with testicular pain.

In order to manage this increase in out-patient work-load, we set up a one-stop, rapid-access clinic for men with testicular lumps or pain. We present our first 30-month experience.

Patients and Methods

We established a clinic staffed by a consultant urologist and a specialist urological ultrasonographer. Clinics were held fortnightly with 25–30 men being seen each time. Three subgroups of patients were seen in the clinic:

1. Men referred by general practitioners under the UK 'two-week rule' Department of Health guidelines³ recommended for men with swellings in the body of the testis suspicious of malignancy.
2. Men referred with other scrotal and testicular abnormalities.
3. Men referred with a history of testicular or scrotal pain.

The patients were first seen by the consultant urologist for history and clinical examination. Patients then underwent scrotal ultrasonography with a 7.5 MHz linear probe. The patient was then given an immediate diagnosis and treatment plan if necessary. Those patients with borderline intratesticular changes on ultrasound were followed up in the same clinic with a further testicular ultrasound at an appropriate interval.

Results

Over a 30-month period (January 2005 to July 2007), 845 new patients attended the one-stop testicular clinic and underwent clinical examination and scrotal ultrasonography. The median age of the patient was 26 years (mean, 41 years; range, 18–86 years). The majority (303 of 845; 33%) of patients were found to have no abnormality on clinical examination or testicular ultrasonography (Table 1). The most common abnormality found was an epididymal cyst (228 of 845; 27%). Only 33 of 845 (4%) patients had findings suspicious of testicular tumour and subsequently underwent radical orchidectomy. In two patients, ultrasound demonstrated testicular tumours (final pathology confirming malignancy) which clinical examination had failed to detect (Fig. 1).

A total of 143 men were referred under the 'two-week rule' for suspected testicular cancer (*i.e.* thought by the referring practitioner to have a mass in the body of the testis). Of these, only 14 (10%) of men seen had sonographic findings suspicious for testicular cancer.

Table 1 Diagnosis made after scrotal ultrasonography in 845 men attending a one-stop testicular clinic

Ultrasound diagnosis	Number (%)
No abnormality	303 (36)
Epididymal cyst	228 (27)
Hydrocoele	96 (11)
Post vasectomy changes	88 (10)
Varicocoele	45 (5)
Suspected tumour	33 (4)
Tunical nodule	24 (3)
Epididymitis	18 (2)
Hernia	5 (1)
Intratesticular cyst	5 (1)
Total	845

None of the men with monosymptomatic orchalgia were found to have a testicular malignancy.

Discussion

We present results from a one-stop clinic for testicular abnormalities that reduces out-patient visits to both the urology and radiology departments. It would seem that the anxiety experienced by men with scrotal abnormalities may be decreased by the reduction in time to urological and radiological assessment. The majority of patients had normal or insignificant benign findings and could be informed, re-assured and discharged. As we were able to see and treat or discharge large numbers of men after a single visit to a clinic staffed by two specialists, we feel that this represents an efficient use of resources.

The incidence of testicular cancer in men presenting to this clinic was low, with only 4% requiring radical orchidectomy and subsequently having cancer confirmed. However, it is important to remember that this clinic is for the assessment of all men with scrotal and testicular complaints, including pain, so it is perhaps unsurprising that many were found to have normal testes or minor pathologies.

Of men referred urgently under the UK 'two-week rule' guidelines by general practitioners, 90% did not have findings suspicious for testicular cancer. Although this may be acceptable from a cancer detection viewpoint, it represents a large number of men who are likely to believe they have cancer until proven otherwise. This supports the provision of rapid access to final diagnosis for these patients. Ultrasound detected two impalpable testicular cancers that would have escaped diagnosis if only clinical examination was performed. In view of the high cure rate of testicular cancer, it may be argued that their outcome would not be prejudiced if they were diagnosed later when the disease became palpable, particularly if testicular self-

Figure 1 Ultrasonograph of impalpable testicular tumour. The patient underwent orchidectomy and was found to have a Leydig cell tumour.

examination continues to be promoted. However, we feel that scrotal ultrasound is important in the assessment of these patients to avoid misdiagnosis, suboptimal treatment and potential litigation, especially if the patient were to present with advanced disease and endure a less favourable outcome.

As none of the men who presented with testicular pain were found to harbour malignancy, it may be argued that they do not require the services of such a one-stop clinic in the current climate where resources need rationing. It is our belief, however, that the ability to re-assure these men promptly is valuable and often results in earlier discharge, less out-patient attendance and, therefore, may be resource-effective.

Conclusions

When training in ultrasound becomes routine for urologists in the UK, and competency in this skill can be proven,⁴ it may be easier to deliver a similar service. Until this can be delivered, we commend this one-stop clinic that provides a rapid service to anxious men and facilitates urgent treatment of those with testicular cancer.

References

- Office for National Statistics. *Cancer Statistics registrations: Registrations of cancer diagnosed in 2003, England*. Series MB1 no.34. London: Office for National Statistics, 2006.
- Moore RA, Topping A. Young men's knowledge of testicular cancer and testicular self-examination: a lost opportunity? *Eur J Cancer Care* 1999; **8**: 137–42.
- Department of Health. *Cancer waiting times achieving the two week target*. Health Service Circular HSC199/205. London: DH, 1999.
- Ellis BW, McNicholas TA, Dunsmuir WW. Should urologists do their own diagnostic ultrasonography. *BJU Int* 2004; **93**: 249–50.