

Management of sexually transmitted disease by surgeons

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The management of 63 patients diagnosed by surgeons as having sexually transmitted disease (STD) was audited. A diagnosis of STD was made in 51 (81%) of patients without taking a sexual history. Only 2 (3%) patients were referred to genitourinary medicine (GUM). Appropriate microbiological specimens were obtained from only two of 52 (4%) patients diagnosed with either pelvic inflammatory disease (PID) or epididymo-orchitis. Reliance was placed on inappropriate specimens in 22 (42%). There was widespread use of inappropriate antibiotics. The management of sexually transmitted disease by surgeons was very poor. These patients should all be referred to genitourinary medicine.

The symptoms and signs of sexually transmitted disease (STD) can be similar to certain surgical conditions. For this reason patients with these diseases sometimes present primarily to surgeons. We have audited the care of these patients by the surgical unit of the Derbyshire Royal Infirmary. The correct management of STD needs to include the following: a sexual history and examination, appropriate microbiological testing and antibiotic therapy, screening for concomitant STD (commonly present), 'test of cure', contact tracing and counselling (1).

Method

The notes of all patients admitted under general surgeons and urologists, between 1 April 1992 and 31 March 1995, with a clinical coding of epididymo-orchitis, pelvic inflammatory disease (PID) and anogenital warts were reviewed. Of 126 patients given these codings, 63 were found to have presented initially to a surgical team and been given a diagnosis of STD. In cases of PID and epididymo-orchitis, notes were audited with reference to (a) the taking of a sexual history, (b) referral to genitourinary medicine (GUM), (c) obtaining appropriate microbiological specimens and (d) antibiotic therapy. In cases of anogenital warts, notes were audited with reference to points (a) and (b) only. Appropriate microbiological specimens were defined as high urethral swab in epididymo-orchitis and urethral and endocervical swabs in PID. Inappropriate specimens were defined as high vaginal swab in PID and midstream urine in epididymo-orchitis.

A total of 63 patients with these codings did not have STD presenting primarily to the surgeon: epididymo-orchitis secondary to urinary outflow obstruction/surgery/trauma/phenol (20), pelvic pain ? cause (5), torsion (2), unknown (18), coding entirely unrelated to illness (5), warts referred for surgery from GUM (13).

Results

Of the patients, 41 had epididymo-orchitis (mean age 30; range 14-56 years), 11 had PID (mean age 32; range 21-53 years) and 11 had anogenital warts (mean age 32; range 21-53 years). Audit results are presented in Table I.

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Table 1. Results of audit

Clinical diagnosis	Sexual history taken (%)	Referred to GUM	Appropriate specimens* obtained (%)	Inappropriate specimens† obtained (%)	Appropriate antibiotic given (%)	Inappropriate (or no antibiotic) given (%)
Epididymo-orchitis (n = 41)	11 (27)	1 (2)	2 (5)	16 (39)	9 (22) (doxycycline/ tetracycline 9)	32 (88) (trimethoprim 14, cephalosporin 6, gentamicin 5, other or given by GP 4, none 3)
PID (n = 11)	0 (0)	0 (0)	0 (0)	6 (55)	3 (27) (penicillin 1, doxycycline/ tetracycline + metronidazole 2)	8 (73) (cefuroxime + metronidazole 2, erythromycin 1, none 5)
Anogenital warts (n = 11)	1 (9)	1 (9)				

*High urethral swab in epididymo-orchitis and urethral and endocervical swabs in PID

†High vaginal swab in PID and midstream urine in epididymo-orchitis

Discussion

Management of STD by surgeons was poor. The diagnosis was made in 81% of patients without a sexual history being taken. Although many aspects of STD management are beyond the scope of surgeons, only 3% of patients were referred to GUM.

Chlamydia trachomatis and *Neisseria gonorrhoea* are the most common causes of epididymo-orchitis and PID, in young, sexually active patients (2,3). To diagnose these infections, specimens must contain cellular material and either be examined by immediate microscopy or placed in culture/transport media. Appropriate specimens were obtained in only 4% of patients in this series. Furthermore, reliance was placed on inappropriate investigations in 42% of patients. False reassurance from midstream urine analysis and high vaginal swabs led to the withholding of antibiotics and, in one patient, failure to remove an intrauterine contraceptive device. Although 85% of patients did receive antibiotics, only 23% received antibiotics active against gonococci or chlamydia. Gonococci should be treated with penicillin or a quinolone, and non-gonococcal (ie chlamydial) disease with a tetracycline or a macrolide, plus metronidazole in PID (4). The extensive use of inappropriate antibiotics by surgeons suggests ignorance of the causative organisms.

Most STD occurs in young patients and is curable. The morbidity associated with mismanaged disease is considerable, eg when chronic pain, infertility and ectopic pregnancy are consequent upon acute or recurrent PID (5). The reason these patients found themselves under the care of surgeons was because their symptoms mimicked surgical conditions. The main concern of surgeons was to exclude surgical pathology. Thereafter there was a failure to care for these patients appropriately. We suspect a similar situation exists elsewhere.

We recommend patients clinically diagnosed with PID or epididymo-orchitis receive analgesia and supportive measures, and are referred to GUM for investigation and treatment. Concern that this may lead to treatment delay is largely misguided, as most treatment prescribed by surgeons is inappropriate. If referral is not practicable, the surgical team should obtain the correct specimens before starting appropriate antibiotic treatment, with referral to GUM at the earliest opportunity. In this series, surgeons largely failed to acknowledge the sexually transmitted nature of anogenital warts. However, these patients also need to be referred to GUM for investigation and follow-up. Following these recommendations will not only improve outcome for patients but also reduce surgeons' workload.

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SURGICAL TECHNIQUE

Simple aid in removal of a diastasis screw

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A simple aid which can be used to remove a diastasis screw, which is used to fix ankle fractures with diastasis at the tibiofibular joint is reported.

It is accepted practice to use clips to close the skin. One clip is placed on the skin at the level of the diastasis screw as seen on the radiograph (Fig. 1).

At the time of removal of the diastasis screw, the temporary marks on the skin left by the clips can be counted as seen on the radiograph and this easily locates the screw head which can be approached through a very minimal incision under local anaesthesia in outpatients.

This simple aid avoids the use of an image intensifier, the need for larger incisions and saves time.

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Figure 1.