Matters Arising

Sexually transmitted diseases in rape victims

We read the report of Estreich et al on victims of sexual assault with interest and can confirm findings of similar rates of STD in such victims referred by a police surgeon in Leeds.

In a 24 month period after July 1988 52 female victims of sexual assault (mean age 19-5yr, range 13 to 48) were referred by a local police surgeon and attended the Department of Genitourinary Medicine, Leeds between 3 days and 4 weeks after the incident.

Sixteen women (28%) had a sexually transmitted disease (seven Chlamydia trachomatis, two Neisseria gonorrhoeae, five Trichomonas vaginalis). A further six women had non specific cervicitis and four had abnormal cervical cytology (two had CIN, the other two defaulted from follow up).

Interestingly four of eleven women who were examined within 96 hours of assault had an STD indicating that such women may be at risk from pre-existing STD. There were no cases of genital warts, herpes simplex or syphilis. All women were counselled for HIV and 11 specifically asked to be serotested mainly because of fear of acquisition of infection. None had any defined high risk factors but in only two cases were the assailants recognised. All serological tests for HIV were negative.

Prior to 1988 very few cases were referred from the local police surgeon. Since then we have developed excellent links with one who examines the majority of assault victims and these now constitute an important source of referral of such women to the department. Local women police constables have taken a supportive role and often accompany victims to the department if requested. A review of all rape cases a few months ago indicated infrequent referrals by voluntary organisations (such as Rape Crisis) and we have now instigated closer links with these groups with a consequent increase in numbers seen. These organisations regularly change personnel and it is therefore important to audit cases of sexual assault that are referred on an ongoing basis, and to maintain a dialogue, so that such women, who have high rates of genital infections, continue to be offered the essential screening services provided by genitourinary medicine departments.

A rapid stain for the diagnosis of granuloma inguinale

The paper entitled A rapid stain for the diagnosis of granuloma inguinale is a welcome addition to the existing literature. It is, therefore, worthwhile to utilise it for rapid diagnosis of the disease. However, this has its limitations for in only 38% of Donovanosis it is positive. In 62% it is not of help. Consequently it has major limitations as a diagnostic tool. It is, therefore, imperative to 'suspect' the diagnosis of Donovanosis on the basis of morphological characteristics of the ulcer. Despite the clinical features being cardinal, the condition may have to be differentiated from chancroid/chancroidal ulcer, primary chancre, herpes genitalis, and squamous cell carcinoma. In fact, at this centre it is customary to make the diagnosis by undertaking a battery of tests to exclude aforementioned genital ulceration. These tests include: dark-ground microscopy for Treponema pallidum, gram-stained surface smear for Haemophilus ducreyi, Giemsa-stained surface smear for giant cells/balloon cells for herpes genitalis, Giemsa-stained tissue smear for demonstration of intra-mononuclear Donovan bodies, haematoxylin-eosin stained tissue sections to establish the histological features of Donovanosis and to exclude squamous cell carcinoma, and demonstration of Donovan bodies in tissue section using slow Giemsa (overnight) technique, serological diagnosis of syphilis, attempt to recover Haemophilus ducreyi on culture.

The clinical diagnosis, supplemented by these procedures improve the diagnostic success to almost 100%.

It is worthwhile to highlight the slow-Giemsa (overnight) technique, in which the tissue sections are placed in a 10% Giemsa-stain for 17 hours. It was possible to demonstrate Donovan bodies in 95% of the cases. The Donovan bodies were found distinctly and in large numbers in the mononuclear cells (intra-cellular). Furthermore, it was easy to demonstrate multicystic cells containing Donovan bodies, well recognised as cells of Greenblatt.
Is a test of cure necessary following treatment for cervical infection with \textit{Chlamydia trachomatis}? 

We read with great interest the recent article by Radcliffe \textit{et al.}\footnote{Radcliffe KW, Rowen D, Mercey DE, \textit{et al.} Is a test of cure necessary following treatment for cervical infection with \textit{Chlamydia trachomatis}? \textit{Genitourin Med} 1990;66:444–6.} We have undertaken a retrospective study of chlamydial infection in female patients.

Our policy has been to screen for \textit{Chlamydia trachomatis} by testing on two occasions at an interval of one week and to confirm cure after treatment by a similar routine of two tests undertaken within 7 and 14 days of completion of treatment. Our findings support the conclusion that tests of cure may not be necessary.

During the 11 months from January 1990 to November 1990, 151 female patients were diagnosed as \textit{Chlamydia trachomatis} positive by tissue culture on irradiated McCoy cells of combined genital samples from the urethra and cervix. Following diagnosis, 150 patients were treated, one having defaulted. The standard regimen was doxycycline 100 mg bd for 10 days with erythromycin stearate 500 mg bd or qds for 10 days in the pregnant or those who could not tolerate doxycycline. Epidemiological treatment of male partners was undertaken.

Twelve patients (8\%) had repeat positive chlamydia cultures during the study period. Of these, five reattended after two negative tests of cure and another four, while not completing two tests of cure, reattended at least three weeks after treatment suggesting reinfection rather than relapse. Only three were found positive at a routine test of cure (table).

We agree with Radcliffe \textit{et al.} that the need for chlamydia testing twice after treatment may not be necessary. However, our study has indicated that more than one screening sample is necessary to diagnose initially chlamydial infection. Only 131 patients (87\%) were positive on first testing with the remaining 19 (13\%) being diagnosed on the second screening test one week later.

The reasons for so many failed diagnoses on the first visit may be due to a number of contributory factors such as scanty material, poor sampling or delay in inoculating the culture media.\footnote{2 Kallings I, Mardh PA. Sampling and specimen handling in the diagnosis of genital \textit{Chlamydia trachomatis} infection. \textit{Scand J Infect Dis} (Suppl) 1982;32:21–4.} Hence we suggest that the time and money saved in not performing two routine tests of cure may be utilised more profitably for initial diagnosis, by undertaking two screening tests on separate occasions. Nevertheless patients still need review to undertake contact tracing, assess treatment compliance and assess the likelihood of reinfection.

Table: Results of tests of cure

<table>
<thead>
<tr>
<th>Number of patients</th>
<th>Number positive for chlamydia (% in parentheses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients treated</td>
<td>150 (100)</td>
</tr>
<tr>
<td>First TOC</td>
<td>120 (1)</td>
</tr>
<tr>
<td>Second TOC</td>
<td>111 (1)</td>
</tr>
<tr>
<td>No TOC</td>
<td>22 (100)</td>
</tr>
</tbody>
</table>

TOC = Chlamydia test of cure.