MEDICAL PRACTICE

Gynaecology in General Practice

Other Sexually Transmitted Diseases—I

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Lymphogranuloma Venereum

Lymphogranuloma venereum is caused by a member of the *Chlamydia* (Bedsonia) group of infective agents. It is not common in Britain, and is thus more likely to be seen in immigrants. There were only 34 cases (in both sexes) reported in 1969 compared with 55 in 1968.

The primary genital lesion, which is small and transient, develops one to three weeks after sexual contact. Some weeks later the infection involves inguinal and femoral lymph nodes, producing a suppurative adenitis with a typical groove over the inguinal ligament. Other regional lymph nodes may be affected, including the deep iliac group; when this occurs on the right side an acute appendicitis may be misdiagnosed. The inguinal lesion may break down with multiple sinus formation and has to be differentiated from the suppuration caused by chancroid, tuberculosis, cat scratch disease, or by any infected lesion of the leg and perianal region. The untreated inguinal syndrome, which may be bilateral, heals with gross scarring, and this blocks the lymph drainage of the genitals causing gross oedema and sometimes ulceration (esthiomene). Infection may also spread via the vagina to the rectum causing proctitis with ulceration and ultimate scarring of the submucosa with stricture formation. Cases have been reported with malignant change following long-standing ulcerative lesions.

DIAGNOSIS

The clinical diagnosis should be supported by an intradermal test (Frei test). The antigen (0.3 ml) and a control are

injected intradermally into the forearm. An indurated papule (8mm or more) appearing within 48 to 72 hours indicates a positive result. This antigen is available from the Public Health Laboratory Service. This service will also receive a specimen of pus or biopsy material from a suppurative lesion for identification of the infective agent or blood for a complement fixation test, which may further aid diagnosis.

TREATMENT

The tetracycline drugs are most effective given over three weeks (500 mg six hourly). Sulphonamides have also been advocated. Suppurative adenitis may need aspiration; partial vulvectomy may be indicated for esthiomene, and the rectal surgeon may advise rectal dilatation or even rectal surgery—including colostomy—for the stricture, which may sometimes extend up into the colon.

Granuloma Inguinale

Granuloma inguinale is caused by *Donovania granulomatis* (the Donovan body), which probably belongs to the Klebsiella group of bacteria. The incubation period may be about seven weeks. The disease occurs in coloured immigrants and is rarely seen in Britain; only three cases were reported in 1969 compared with 11 in 1968. Lesions may appear on the groins, perineum, or genitals. They develop into raised red velvety granulomatous lesions, which bleed easily and may become very extensive, and malignant changes may supervene. Subcutaneous granulomata (pseudobubos) may sometimes develop in the inguinal region. Ulceration may occasionally affect the vagina and even the cervix. The Donovan bodies are identified in a spread of granulomatous material stained with Giemsa stain; they are seen as small capsulated bodies (like safety-pins) in the mononuclear cells. Tetracyclines given for up to three weeks (500 mg six hourly) are effective, but surveillance should be prolonged as relapse may occur.

Non-specific Genital Infection

The cause of non-specific infection of the lower genitourinary tract is still uncertain. Non-specific urethritis in men is more likely to produce symptoms and signs and has been separately reported from the clinics since 1951, the number in 1969 being 40,320. In most cases the diagnosis in women (who are often symptomless) has been attempted in known female sex contacts of men with this condition, especially the primary (source) contact, but some women whose contacts are unknown have presented with genitourinary or pelvic symptoms. In all these cases full genital tests should exclude gonorrhoea, trichomoniasis, and candidiasis. If there is evidence of urethritis, vaginitis, cervicitis, proctitis, or of pelvic inflammation treatment should be given. Possible causes of non-specific genital infection which have been studied may be as follows:

CHLAMYDIA (BEDSONIA)

The ocular types in Group A are now realized to be identical and have, therefore, been renamed trachoma/inclusion conjunctivitis (T.R.I.C.) agent. This agent can be found in the eye of the newborn infant with a mild ophthalmia, traced back to the mother's genital tract and thence to the urethra of the male sex partner who has non-specific urethritis. The identification of T.R.I.C. agent in genital material is still in the research stage either by growth in the yolk sac or, better, on tissue culture, and new fluorescent blood tests for antibodies are being developed. Positive isolates have been identified in the urethra, cervix, vagina, and rectum, but the exact proportion infected with T.R.I.C. agent remains to be established.

MYCOPLASMA

This organism, formerly termed pleuropneumonia-like organism (P.P.L.O.), is very commonly found in all types of lower genital-tract infection, but as it has also been identified at the same site in a number of normal controls, many have considered it a saprophyte. Possibly, however, it may become pathogenic under certain circumstances; recently it has been found in the upper genital tract in patients with pelvic infection, and circulating antibodies have been discovered.

BACTERIA

Most bacteria found in the lower genitourinary tract are either saprophytic or secondary invaders; exceptions may be *Corynebacterium vaginale* (previously classified as *Haemophilus vaginalis*), which may be a low grade pathogen causing a thin purulent vaginitis. The organism is seen in the moist vaginal slide inside epithelial cells (clue cells of Gardner), but definitive diagnosis by culture is still a research technique. The presence of *Escherichia coli* or *Bacillus proteus* may suggest some unidentified upper renal tract lesion in the patient or in her sex partner.

The incubation period of non-specific infection is somewhat longer than that of gonorrhoea, but, as women are so frequently symptom-free, it is often difficult to assess accurately. Local and pelvic complications are similar to those of gonorrhoea, but less acute and more liable to relapse. The complication of arthritis, conjunctivitis, and skin and mucous membrane lesions (Reiter's disease) is rarer than in men, but has been reported.

TREATMENT

Treatment with penicillin is ineffective; tetracyclines are the drugs of choice. Failure to treat will result in reinfection of the male partner. Patients may be given oxytetracycline 250 mg six hourly or combined tetracyclines, 300 mg twice daily for 20 days. There is no evidence that any local vaginal pessary or application is in any way effective. Higher oral dosage may be indicated in pelvic infection or a supplementary intramuscular tetracycline drug 100 mg may be given six hourly.

FOLLOW-UP

The follow-up is similar to that of gonorrhoea. Patients with persistent or chronic recurrent pelvic infection should be referred to a gynaecologist for pelvic diathermy or pelvic surgery. Further courses of antibiotics rarely help this type of case and pelvic symptoms and signs tend to persist despite all forms of treatment; sterility commonly results.

(To be concluded in next week's B.M.J.)