DON'T FORGET SYPHILIS
R D MAW and T HORNER
From the Department of Genito-Urinary Medicine
Royal Victoria Hospital, Belfast

INTRODUCTION

THE incidence of primary and secondary syphilis has shown a steady increase in Great Britain in the last decade, from a figure of 1,162 in 1970 to 1,543 in 1979 for England and Wales. The incidence in Northern Ireland has been somewhat more sporadic (Figure) but we have found, in common with our colleagues in the United Kingdom, a tendency to forget these conditions in arriving at a differential diagnosis. The following cases were collected at the Genito-Urinary Medicine Department of the Royal Victoria Hospital, Belfast between 1978-80 and illustrate some situations where misdiagnosis can easily be made.

CASE HISTORIES

Case 1

Mr. B presented voluntarily at the Genito-Urinary Medicine Department, Royal Victoria Hospital, Belfast. He gave a history of a lump on his foreskin for eight to nine days. There was no history of pain or swelling in the groin. Examination revealed a 1 cm diameter indurated, non-tender ulcer at the corona. Darkground examination was positive for Treponema pallidum and subsequent serology showed a positive Venereal Disease Research Laboratory (VDRL) Wassermann (WR), Treponema pallidum haemagglutination (TpHA) and fluorescent treponemal antibody (FTA).

Sexual history revealed ten different female contacts in the previous three months. There was no homosexual contact. Of his 10 contacts three were definitely identified and attended our clinic in response to his request. One patient
defaulted after an initial negative assessment. One developed a primary chancre on the vulva on follow up and the third was found to have an asymptomatic primary chancre on the cervix on speculum examination. This left seven unidentified contacts.

Cases 2, 3 and 4 all socialized at the same club as Mr. B and were thought to be at least secondary sexual contacts of his.

Case 2

Mr. K presented to a casualty department in Belfast complaining of soreness in the right groin. Examination at that time revealed swollen tender glands in the right inguinal region. No site of infection was found in the right leg or foot. There was no record of a genital or perianal examination having been made. Magnapen, one capsule three times daily was prescribed for one week and review arranged for one month later.

At follow up the patient said his inguinal pain and swelling had resolved. On examination painless right and left inguinal adenopathy persisted and, as well, adenopathy was found in the right axilla. No liver or spleen was palpable. A provisional diagnosis was made of reticulosis and the patient admitted for lymph node biopsy. On the eve of biopsy the patient was noted to have developed a generalised macular, symmetrical, non irritable rash. Syphilitic serology was taken and reported positive and the patient referred to our department.

On examination at this time when the prepuce was retracted a still active primary sore of the penis was found and he had a typical macular rash of secondary syphilis. Mr K had not noticed this lesion or complained of it at any stage. Although at first an inaccurate sexual history was obtained, eventually three contacts were established. No history of homosexual contact was given.

Case 3

Miss L presented to her general practitioner complaining of "blisters" on the vagina. An external genital examination was performed and clotrimazole cream and pessaries prescribed. The blisters persisted despite this therapy and further local applications were prescribed two weeks later. At this stage she informed the doctor that her boyfriend had a sore on his penis and was advised he should use Savlon baths. No examination was recommended.

The patient returned to her doctor one week later complaining of a sore throat, headache and generalised rash. A diagnosis of measles was made. A further examination was requested one week later from a different doctor who carried out luetic serology which was strongly positive and she was referred to us. Examination at that time revealed a generalised macular rash on the body and bilateral inguinal adenopathy. Genital examination revealed thickening of the right labium majus where the ulceration had been. Cervical erosion was noted and proctoscopy revealed papular lesions on the rectal mucosa. Darkground examination from cervical and rectal lesions both demonstrated *Treponema pallidum*.
Sexual history revealed Miss L had been out with Mr K but she denied sexual intercourse with him, although he later confirmed such contact. Her regular partner was found to have two active primary lesions on examination and a further sexual contact of his subsequently was found to have an asymptomatic cervical primary lesion.3

Case 4

Mrs N a 26 year old woman attended our clinic giving a history of having had pains in the head and joints two months ago which resolved spontaneously after two weeks. This was followed two weeks later by a generalised copper rash involving the whole body. The rash was said to be clearing spontaneously. The reason for attending us was that she had read in a womans’ magazine that syphilis could cause such rashes. Examination revealed a fading generalised rash and lymphadenopathy of cervical and inguinal areas. No spirochætes were noted but her luetic serology was reported as TpHA positive 1280, WR positive 512, VDRL positive and FTA positive.

On questioning Mrs. N said her husband had developed a penile sore six months previously followed by the onset of a generalised rash which looked just like her own. At that time he was referred by his general practitioner to a dermatological clinic where a diagnosis of exacerbation of psoriasis was made.4 On perusing his notes, no mention was made by the patient of the genital sore nor was any such question recorded. Mr N was subsequently confirmed to have syphilis and his contact was traced and she was also positive, but none of her multiple contacts subsequently appeared for investigation.

Case 5

An approximately seven month gestation infant was born at home to Miss D. There had been no antenatal supervision of the pregnancy. Shortly after birth the child was noted to be in respiratory distress and transferred to a special care paediatric unit. The child was noted to have a peculiar rash, especially marked on its hands and feet and had a five finger breadth liver and spleen. Chest x-ray showed a patchy infiltration of the lungs. The first examining doctor who was from Africa, diagnosed congenital syphilis. Unfortunately the serological specimen was mislaid and the child subsequently treated for pneumonia on which treatment the generalised bodily rash resolved and the liver and spleen size resolved. It was only after belated serological tests confirmed the diagnosis that we saw this case. The mother was tested and confirmed as suffering from syphilis. History taken from her confirmed sexual contact with the above group, although she denied having had any symptoms or signs that might have suggested primary or secondary syphilis.

Case 6

Mr R, a 31 year old homosexual, who was not associated with the above contacts, was being treated as an inpatient for depressive illness when he began to complain of rectal pain and bleeding, worse on defaecation. Rectal examination at that time revealed an anal lesion to which local antiseptic applications were
made. Subsequently he developed inguinal adenopathy and had a swinging temperature. At this stage he was referred to a surgical department for investigation with a presumptive diagnosis of rectal abscess or infected haemorrhoids. An anal dilatation was carried out and antiseptic applied to the perianal lesions seen. The next day a generalised macular rash was noted and the patient referred to our department where spirochaetes were isolated from multiple scrotal ulcers but none from the perianal lesions, presumably due to the antiseptic applications. The patient had a typical generalised secondary luetic rash.

DISCUSSION

These cases illustrate many of the difficulties encountered by the practising doctor and venereologist in the handling of cases of sexually transmitted disease and of syphilis in particular. Syphilis was traditionally described as the great mimic. In the Western World this has passed to the collagen diseases because of the comparative rarity of infectious syphilis in the last three decades. Consequently the diagnosis which was once included in many differentials is now understandably enough forgotten. From the figures given the incidence of infectious syphilis is seen again to be rising in our community and hence should once again be considered in many situations.

Case 1 with his seven missing contacts emphasises the need for a contact tracer for an efficient Sexually Transmitted Disease Service. The situation in Northern Ireland has been that because of the civil disturbance, contact tracing was withdrawn and only now have we been in a situation to re-advertise this position.

Case 2 emphasises the need for adequate physical examination which must include a genital history and examination if indicated. Too many doctors baulk at this due to their own embarrassment. In Case 3 at least one girl could probably have been prevented from contracting syphilis if the undiagnosed genital ulceration had been referred to the local Genito-Urinary Medicine Clinic.

Case 4 underlines the fact that in a generalised body rash syphilis still needs to be excluded. Case 5 would undoubtedly have been avoided if the mother had attended for antenatal care but once again could have been avoided earlier with effective contact tracing. It was interesting that the African doctor made the clinical diagnosis. Congenital syphilis is a very common disorder in the African continent.

Case 6 in particular illustrates a common situation today in Great Britain where the ratio of male to female primary and secondary syphilis is 8 to 1 and the majority of these males are homosexuals. We feel that it is essential that any young male presenting with rectal pain and bleeding and anal lesions should be adequately questioned and investigated as to a homosexually transmitted infection which, of course, may include gonococcal, herpetic or Chlamydial proctitis, as well as syphilis, to mention the commoner infections.
The purpose of this paper is to draw attention of practitioners to this problem which will undoubtedly become commoner and to stress the importance of an adequate sexual history and examination in patients to avoid the obvious dangers of neglected sexually transmitted disease.7

REFERENCES
1. Roy RB, Laird SM. Delayed diagnosis of early syphilis. Br J Clin Pract 1974; 28: 261-2.
2. Drewson IM, Singer Carol, Valentine AJ, Armstrong D. Infectious disease mimicking neoplastic disease. Arch Intern Med 1977; 137: 156-60.
3. King A, Nicol C. Venereal Disease. 4th ed. London: Balliere Tindall, 1975: 35.
4. Milich MV. Case of psoriasis-like syphilis in a patient suffering from psoriasis for 12 years. Vestn Dermatoł Venerol 1980; 4: 69-71 (Eng Abstr).
5. Nazeri MM, Mustier DM, Schell RF, Bimcha M. Syphilitic proctitis in a homosexual. JAMA 1975; 231: 389-90.
6. British Co-operative Clinical Group. Homosexuality and venereal disease in the United Kingdom. Br J Vener Dis 1980; 56: 6-11.
7. Editorial. Never forget syphilis. Br Med J 1975; iv: 60-61.