Genital infection in young delinquent girls

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Juveniles who have been brought before a Magistrate's court are, in most cases, sent to a Remand home for a short period to allow a full investigation to be carried out. The home at which the examinations described here were carried out is especially intended for girls between the ages of 14 and 17 years. The magistrates may, at their discretion, request that a girl be examined to see if she is pregnant or has contracted any venereal disease. A venereologist attends the home twice a week to carry out these special examinations. Assistance is given by a nurse who is employed full-time at the home.

The procedure adopted is as follows. Shortly after the girls have been admitted, the nurse talks to them and explains the nature and purpose of the examination. It is made quite clear that this will not be carried out unless the girl herself is willing to co-operate. If she is under 16 years of age, written consent from the parent or guardian is also obtained. After these preliminaries, the girl is brought to see the venereologist at the next session. Besides being asked for the usual details of medical history, menstrual history, and sexual experience, each girl is asked directly if she has ever noticed any vaginal discharge. A genital examination is then made, with particular attention to the condition of the hymen, signs of genital and pelvic infection, and signs of pregnancy. Smears and cultures for the diagnosis of gonorrhoea are taken from the urethra and cervix, or from the vagina if the hymen appears to be intact. A specimen of vaginal secretion is taken to detect the presence of trichomonads.

All these tests are repeated after an interval of a few days. Smears for the detection of *Candida albicans* are not made as a routine in every case. Rectal examination is not made unless there is some particular indication, as it is considered that this would not be well tolerated and the number of girls refusing examination would be increased. Serological tests for syphilis are carried out in every case.

Between January 1, 1965, and December 31, 1968, 2,002 girls were admitted to the Home. A Court Order requesting the special examination was made in 680 cases, 32 per cent. of the number admitted. In addition, 82 girls were examined at either their own

request or that of the general practitioner who sees every girl on admission. Five girls refused to see the venereologist at all and 43, when interviewed, refused to be examined. Full examination was carried out in 716 cases, 93.9 per cent. of the total number in which it was recommended.

Sexual history

Of 757 girls interviewed, 133 (17.5 per cent.) denied having had any sexual experience and 624 (82.5 per cent.) admitted to sexual intercourse. The majority of the latter 394 (62 per cent.) stated that this had been with only one known consort; 141 (22.7 per cent.) admitted to more than one consort, but stated that all were known to them; only 89 (14.3 per cent.) admitted intercourse with casual contacts.

Symptoms

501 girls (64.8 per cent.) denied having any symptoms at all. A further 94 (12.6 per cent.) had no complaint but admitted to having noticed a slight discharge at some time, usually since the start of their first menstrual period. 116 girls (15.3 per cent.) complained of, or admitted to, symptoms suggesting genital infection, e.g. vaginal discharge, dysuria, etc. 46 girls (6 per cent.) had symptoms of pregnancy.

Results of examination

Of 716 girls examined, 96 (13.4 per cent.) were judged to be *virgo intacta*. This represented 72 per cent. of those who denied intercourse.

317 girls (44 per cent.) were found to be pregnant or were suffering from genital infection or venereal disease. The numbers of cases of each pathological condition found are listed below; 48 girls were pregnant.

Condition	No.	Per cent.
Trichomoniasis	200	28.2
Gonorrhoea	61	8.8
Non-specific vaginitis	48	6.7
Genital warts	24	3.3
Treponemal infection	4	0.5

The most commonly associated conditions were gonorrhoea and trichomoniasis. This association was found in 50 per cent. of the cases of gonorrhoea and in 10 per cent. of the cases of trichomonal infestations. Some cases of vaginitis due to *Candida albicans* were seen, but the number of these is not included, as tests for this condition were not done systematically during the whole of the period under review. The four cases of treponemal infection were due to secondary syphilis, asymptomatic neurosyphilis, congenital syphilis, and inactive yaws, respectively.

Discussion

The girls in this series cannot of course be regarded as representative of the general adolescent population. They had all been brought before a court either because of antisocial behaviour, or because of particularly unfortunate personal and family circumstances. A high percentage admitted to sexual experience, but there are indications that they were not, as a group, markedly promiscuous. This impression is gained firstly from their own statements. One might have expected these to be unreliable, but there is considerable agreement between the histories obtained and the clinical findings. 72 per cent. of those denying intercourse were unmistakably *virgo intacta* and many others who were possibly so are not included in this percentage. 96 per cent. of the girls found to be pregnant had reported symptoms, in most cases, amenorrhoea of short duration. In a majority of cases in which infection was found but no symptoms had been mentioned, there were no marked clinical signs to suggest a deliberate suppression of facts. Secondly, the relative incidence of different infections differs from what one would expect to find in a very promiscuous group. Keighley (1960), reporting the results of routine examinations carried out in Holloway Prison, found evidence of gonorrhoea in 33 per cent. of prostitutes of all ages, and in 48.9 per cent. of prostitutes under the age of 20, but in only 11 per cent. of the general population of the prison. The incidence in the present series, 8.8 per cent., is comparable to this last figure. The incidence of infestation with *Trichomonas vaginalis* in the present series, 28 per cent., is relatively high. Experience in gynaecological and antenatal clinics suggests that this condition is still very prevalent in the general population. It therefore seems possible that routine tests carried out in any group of sexually active adolescents might reveal an incidence of infections comparable to that found in this series.

The continued high incidence of gonorrhoea is a matter for grave concern and it is generally accepted that an important factor in this is the reservoir of

undetected infections in women. Much work has been done in recent years to improve and intensify methods of contact-tracing, but this approach by itself cannot give complete control because of the number of unidentified and anonymous contacts. The detection of minor infections, particularly of *Trichomonas vaginalis*, is also of importance. Although metronidazole is a very effective remedy, little effort has been made to use it in a systematic way to reduce the incidence of this distressing and very prevalent condition.

Routine examinations of young women would seem to be a logical approach to these problems. The practice of making such examinations has so far been largely restricted to prisons, Remand homes, and similar institutions. The experiences with the present series have shown that even emotionally disturbed and difficult girls accept the idea that examination is desirable if they have run any risk of infection. It is suggested that serious consideration should be given to the possibility of extending the practice to other groups, for example patients attending antenatal clinics, family planning clinics, and student health clinics. Examinations should be conducted by venereologists working in co-operation with colleagues in other specialties.

Summary

The procedure used to detect cases of venereal disease and genital infection in a Remand Home for girls is described. During a 4-year period (1965-68), 716 girls aged from 14 to 17 years were examined, the majority because of a request from the Magistrates. A further 48 girls refused to be examined, although the Magistrates had recommended it. Of the girls seen, 82 per cent. admitted sexual experience—62 per cent. of them with one consort only. Only 116 girls (15.3 per cent.) had symptoms suggestive of infection, but 317 (44 per cent.) were found to have some infection and/or to be pregnant. The incidence of gonorrhoea was 9 per cent. and of trichomoniasis 28 per cent.; 48 girls were pregnant. It is concluded that in this group routine examination detected a significant number of asymptomatic infections, although comparatively few girls were promiscuous. A high degree of co-operation was obtained, although the girls were in a situation of emotional disturbance. It is therefore recommended that similar routine examinations should be considered in any group of sexually-active young females.

Reference

KEIGHLEY, E. (1960), *Lancet*, 2, 253.

Les infections génitales chez les jeunes délinquantes**SOMMAIRE**

On expose la méthode mise en oeuvre pour découvrir les cas de maladies vénériennes et d'infection génitale dans une maison de détention pour filles. Pendant une période de 4 ans (1965–68), 716 filles âgées de 14 à 17 ans furent examinées, la majorité sur demande des magistrats. 48 autres refusèrent l'examen, bien que les magistrats l'aient demandé. 82 pour cent des filles examinées reconnaissaient avoir eu des rapports sexuels—avec un seul partenaire pour 62 d'entre elles. 116 filles seulement (15,3 pour cent) présentaient des symptômes faisant

penser à une infection mais chez 317 (44 pour cent) on trouva une maladie vénérienne et/ou une grossesse était en cours. L'incidence de la gonococcie fut de 9 pour cent, et celle de la trichomonase de 28 pour cent; 48 filles étaient enceintes. On conclut que, dans ce groupe, l'examen de routine a permis de découvrir un nombre significatif d'infections asymptomatiques, bien que la promiscuité ait été relativement peu importante. Un haut niveau de coopération fut obtenu, bien que ces filles fussent dans une situation favorable aux troubles émotionnels. En conséquence, il est recommandé d'envisager des examens de routine semblables pour tout groupe de jeunes femmes sexuellement actives.