REFRESHER COURSE FOR GENERAL PRACTITIONERS

ALLEGED RAPE

BY

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The number of cases of rape and sexual assaults on females and unnatural offences is not very large when considered in proportion to the population of this country, but, small though the number may be, the cases cause a considerable amount of anxiety to the practitioner who has to deal with them. It is, moreover, significant that crimes of this nature have shown for the last 50 years a regular and steady increase. For example, the annual average number of such crimes known to the police for successive five-year periods from 1900 to 1949 was :

1900-4	..	..	1,184	1925-9	..	..	2,303
1905-9	..	..	1,312	1930-4	..	..	2,311
1910-14	..	..	1,748	1935-9	..	..	3,001
1915-19	..	..	1,186	1940-4	..	..	3,878
1920-4	..	..	1,893	1945-9	..	..	6,235

The annual figures for the past six years show the increasing incidence even more strikingly :

1945	..	..	5,215	1948	..	..	6,795
1946	..	..	5,703	1949	..	..	7,378
1947	..	..	6,082	1950	..	..	7,993

An increase from 1,184 to 7,993—that is, an increase of more than seven times over a period of 50 years—is far too serious to be put aside lightly. Unnatural offences have increased similarly, from 216 in 1900 to 4,416 in 1950—that is, an increase of over 20 times.

The investigation of cases of alleged rape throws a great responsibility on the medical man, for the authorities are likely to give considerable weight to his report before proceeding with a charge. It is, of course, obvious that there is no charge that is more easily preferred than that of rape or attempted rape, and whatever the result of legal proceedings the reputation of the accused person may be permanently damaged, and there may be lifelong psychological disturbances in the case of the victim.

There are many reasons which impel women to bring false accusations, and there are many means whereby a guilty man may succeed in casting doubt on the veracity of his victim. In the nature of things there is commonly very little prospect of satisfactory or conclusive corroboration from ordinary witnesses to fact, hence the importance of the medical evidence.

Limitation of Psychological Damage

Cases of this nature, involving as they do in many cases quite young girls and sometimes children, require to be handled with much care. There is a great danger of psychological repercussions, and many of these may be avoided by proper examination by the physician. In the case of young children there should be as little fuss as possible, and parents and others should be warned not to get the child's mind fixed upon the assault.

The examination should be carried out as if it were an ordinary examination for medical purposes, and in children and young adults all the information available

should be obtained at one examination. It is obviously very embarrassing to young women, and if more than one examination is made then the psychological trauma is multiplied. It is necessary, however, to have a complete examination; no question of modesty should prevent the physician from making a complete examination of the whole body as well as the genitalia. It is also necessary to take a specimen from the vagina, and this, together with the whole of the information about bruising, laceration, or the obvious presence of seminal matter, should be observed and recorded, as I have said before, at one examination and one examination only.

Legal Background

Rape is regarded as a serious form of crime against the person, and the penalties imposed are correspondingly severe. Both in Scotland and in England rape has for long been a crime in Common Law, and in England it was, of course, included in the consolidating Act of 1861, which aimed at making statutory provision for all forms of offences against the person. In section 48 of that Act it is stated that "whosoever shall be convicted of the crime of rape shall be guilty of a felony, and being convicted thereof, shall be liable, at the discretion of the Court, to be kept in penal servitude for life. . . ." Though the maximum penalty is not normally imposed nowadays, the possibility remains as a reminder of the serious view still taken by the Law of a crime which was, indeed, a capital offence until about one hundred years ago. In addition, the grave moral and social implications involved must add to the weight of responsibility which often attaches to the evidence given by the medical practitioner.

By Common Law definition, rape is the carnal knowledge of a woman forcibly and against her will (or, in Scotland, of a girl below the age of 12, whether forcibly or not). In the eyes of the Law, carnal knowledge has been effected when there has been any degree whatever of penetration by the penis within the private parts of the female. Penetration need not be complete: the hymen need not have been ruptured; and there need not have been any seminal emission. The force exercised by the assailant must be such as is calculated to overcome the physical resistance of the victim or her capacity for physical resistance. It need not, however, consist only in the exercise of physical violence towards her, but may consist in the offering of threats such as might reasonably induce a state of terror or otherwise impair her capacity for physical resistance. Similarly, her capacity for resistance may be lowered by the use of drugs, by partial strangulation, or by general violence. It follows, therefore, that, while we usually expect to find physical evidence of resistance on the person of the female, there may be circumstances which limit the degree of resistance that can reasonably be expected, or even eliminate the possibility of physical resistance entirely.

If carnal knowledge has been effected with the consent of the female concerned, such carnal knowledge cannot constitute rape in the Common Law sense of the term, but the consent must be voluntary and comprehending. A very young girl, who is ignorant of the nature and significance of the act, cannot be expected to give a valid consent, and reference has already been made to the Scottish Common Law extension of the definition of rape to cover cases in which girls under the age of 12 years are involved. A wider development of the same principle was included in the Criminal Law Amendment Act of 1885, by which it was made unlawful to have carnal knowledge or to attempt to have carnal knowledge of girls under the age of 16 years, even with their consent. The forcible carnal knowledge of any such young girl still constitutes rape, of course, but carnal knowledge with her consent constitutes a statutory crime which, although not called rape, is of a kindred character. If the girl be between the ages of 13 and 16 years the crime is classified as a "misdemeanour"; whereas if she is under the age of 13 years carnal knowledge constitutes a "felony" ranking in seriousness alongside rape.

The Criminal Law Amendment Act of 1922 laid down that the fact that a girl might reasonably have appeared to be 16 years or over, or may have made a statement to that effect, is not a valid defence against a charge of this nature except in the case of a man of 23 years or under who is charged with the offence for the first time. The Act of 1885 also made it an offence for any person, knowing that a female was an idiot or imbecile, to have carnal knowledge of such a female, even with her consent.

Consent to Examination

It is against this legal background that the aid of the medical practitioner is invoked, and a further consideration he must bear in mind is that the female to be examined is not a "patient" in the usual sense of the term. He cannot therefore take for granted the consent to examination which he can normally assume in practice. He must obtain the formal consent of the woman to be examined, or in the case of a child the consent of her parent or guardian. In the same way, if requested to examine a suspected or accused person, the examination should be made only with the expressed consent of the man concerned. If consent is withheld the doctor should proceed no further with the case.

History

Before examining the person of the alleged victim, the doctor should obtain as much preliminary information as possible—for example, regarding the prior movements and activities of the victim and the assailant, whether they were strangers or previously known to one another, the locus and circumstances of the alleged assault, whether screams were heard or not, the subsequent movements and behaviour of the parties concerned, and so on. The extent of information available varies from case to case, and, of course, the doctor must not rely upon it as being all established fact. Much of it may prove to be quite otherwise, and many important elements may be subsequently uncovered. But as a rule the preliminary knowledge serves to orient the examiner's mind and prepare him for his first real task—namely, the obtaining of a history from the victim herself.

The victim should be allowed to tell her story in her own way, and, if possible, all relations or friends should be excluded from the room. The doctor's questions should be directed towards the filling in of details which the victim may tend to omit because they are unpleasant or indelicate, or because she regards them as irrelevant. It is essential that detailed information should be obtained: for example, regarding the amount and type of violence used; the place or places in which a struggle occurred; the nature and duration of the struggle; whether or not she screamed, and if not, why not; the positions of victim and assailant; and the experiencing of any local sensation of pain or penetration or emission, or any subsequent pain, or haemorrhage, or difficulty in micturition.

It is important that the element of time in relation to the various phases of the encounter and assault should be inquired into, and also the lapse of time between the assault and the examination itself. The reason for any undue delay should be elicited. While the history is being obtained, opportunity should be taken to note the reaction, demeanour, and emotional state of the victim, also whether there is any suggestion of pain or discomfort in her physical attitude. If there is any suggestion that drugs or alcohol have been administered, a history of the time of taking any food or drink, the taste of such food or drink, the time of onset of any symptoms, and some details of the symptoms should be elicited.

If the history is taken in this way the doctor is well apprised, before his physical examination begins, of the victim's general physique and mentality and of her capacity for resistance. He knows the degree of violence and the extent of the carnal knowledge alleged. He knows whether it is claimed that physical resistance was maintained to the uttermost, or whether there are other elements in the case which may have modified the victim's ability to resist. He will no doubt have formed an opinion of the intelligence and credibility of the victim, but even when there are peculiar or unsatisfactory features in her story he should not allow them to prejudice his mind.

General Examination

The general examination involves a close scrutiny of the whole body for marks of violence. The extent of such evidence will depend, of course, on the nature of the alleged assault and on the truth of the allegation. The more prolonged, and effective the resistance of the female, and the greater the ruthlessness of the assailant's violence, the more marked will be the physical effects upon the body of the victim. Conversely, if the elements of terror or general exhaustion, or of comparative physical frailty, or enfeeblement through illness, alcohol, or drugs have played a part there may be a relative or complete absence of injury on general examination. Similarly, in cases relating to the Criminal Law Amendment Act, in which the girl has acquiesced but is under the age of valid consent, no evidence of general violence need be expected, and the same is true in many cases involving very young children, who will hardly have appreciated the nature of the act committed.

Where there has been vigorous resistance and a prolonged struggle, the commonest injuries found are bruising and scratches on the face and neck; bruising on wrists, arms, and shoulders, where the victim has been gripped or struck; bruising or abrasion on the back,

where she has been thrown down or forcibly pressed against a hard surface; abrasions on the knees and over other bony prominences if she has been dragged; bruising and scratches on the thighs and bruising about the shins and ankles sustained while the assailant has attempted to force the legs apart. When there is evidence of blows on the head, or a strong indication of partial asphyxia through pressure upon the neck, it must be remembered that the effects of such forms of violence may well have deprived the victim of any capacity to resist thereafter, and this may well explain the absence of any injuries elsewhere on the body. It is obvious how, in this and other respects, the final opinion is influenced by the correlation or otherwise between the history given by the victim and the doctor's findings on physical examination.

Local Examination

The genitalia of the alleged victim must be examined carefully in a good light. The findings will depend on the completeness and violence of the penetration which has been effected, on the age of the victim and the development of the parts, on whether she was previously a virgin or accustomed to intercourse, and on her parity.

If the victim is a young child, forcible penetration by an adult male organ will almost inevitably cause serious injury. There will be severe laceration with evidence of free haemorrhage, there will be great associated pain and shock, and the victim will be seriously ill. In the defence of such cases, if interference is admitted at all, the suggestion will frequently be that there was no introduction of the penis. The doctor should therefore endeavour to assess whether the injuries present are consistent with digital interference or insertion of any object other than the penis. More commonly, where the victim is very young, no serious endeavour has been made to effect penetration, and there may be no local injury at all, or only a slight superficial reddening and tenderness.

In older victims whose parts were still in the virgin condition before the assault, important evidence of penetration may be found in the form of a recently ruptured hymen. The hymen varies so considerably in form (see Figs. 1, 2, and 3) that great care must be taken to avoid mistakes. If examination is made within 48 hours or so of the alleged assault, however, the red margins of a recent tear will still be evident and there

will still be some associated tenderness. Earlier examination may show evidence of haemorrhage from the tear. If the hymen is put on the stretch the nature and extent of the tear will be more readily manifest, and it will commonly be found that a tear, as distinct from a natural fold or crenation, extends right to the vaginal wall at the base of the hymenal attachment. It must be remembered that rape may have occurred without tearing the hymen, either because the penetration has not been sufficiently deep or, more rarely, because the hymen is unusually distensible. Where the hymen is recently ruptured, however, it is also conclusive evidence of recent penetration by some such object as the male organ, although, of course, by itself this does not necessarily imply lack of consent by the alleged victim or the use of force by the alleged assailant.

If the hymen was not in the virginal condition at the time of the assault no fresh tear is to be expected. Nevertheless, if the woman is unaccustomed to intercourse there is likely to be bruising and pain resulting from violent penetration, and any such feature must be sought and noted. If she is accustomed to frequent intercourse, and still more so if she has borne children, penetration by the male organ, even though violent, is seldom accompanied by any significant injury. In all cases the examination of the genital parts will naturally include inspection of the vulva and perineum and adjacent surface of the thighs for scratches, abrasions, and bruises caused by the hands and nails of the assailant.

Any matting of the pubic hair should be noted, as this may well be due to the presence of dried seminal fluid. If present, the matted hair should be cut and suitably examined for spermatozoa (see below). In all cases, too, it is most desirable that a sample of vaginal fluid be taken, by swab, spatula, glass rod, or other means, in order to determine the presence or otherwise of seminal fluid in the vagina. The presence of seminal fluid is by itself no proof of rape, but it is proof of penetration and emission. Immediate microscopical examination may reveal the presence of live spermatozoa—a clear indication that the penetration and emission occurred within a few hours of the examination. Smears may be made and examined at once, and the remainder of the fluid or swab can then be sent for corroborative examination. If a discharge

is present a sample or swab of any such discharge should be taken so that its bacteriological character can be established by microscopical examination. If any discharge appears some time subsequent to the alleged assault, similar examination is called for, because it may be venereal in character and may furnish an important link with the assailant. If there is haemorrhage the doctor must satisfy himself regarding its origin, in particular whether it is menstrual or otherwise.

The examination of an alleged assailant must also be undertaken only with the consent of the individual. The general examination will be for signs of injury, particularly scratches, about the face and hands. The local examination, besides excluding such features as obvious sexual abnormality or incapacity, may also serve

FIG. 1.—Intact hymen, showing slight notching of the margin. FIG. 2.—Intact hymen, showing fimbriated margin. FIG. 3.—Ruptured hymen, showing tear in usual posterior position.

to prove that there has been recent emission or show the presence of blood-staining or abrasion about the genital parts.

Corroborative Evidence

Much useful evidence can often be obtained by an examination of the locus, and especially from an examination of the clothing. The clothing of the victim is examined for tears, staining with earth or vegetable matter, signs of dragging, and for the presence of blood or seminal staining. Seminal stains have a characteristic appearance when they are extensive enough and are on a good background, but small smears are often very difficult or impossible to detect with the naked eye. Examination under ultra-violet light is helpful in picking out suspicious areas. Any suspicious stain must be examined further, and, while the Florence test is valuable in that a positive result is extremely suggestive of the presence of seminal material, the only conclusive proof is the demonstration of actual spermatozoa in suitably stained smear preparations from the suspicious area. It is unlikely that the practitioner will wish to carry out laboratory tests to prove the presence of seminal matter, but if he wishes to do so the simplest chemical and microscopical tests may be carried out as follows.

A small portion of the stained material is placed on a glass slide, stained side downwards, and moistened with acidified distilled water (one drop of hydrochloric acid to 1 oz. (28.4 ml.) of water). A watch-glass is placed over the slide to prevent drying, and the preparation is allowed to stand for a certain time: old stains may require several hours, but for recent stains one hour or less will suffice. After standing, the moistened material, which may be gently teased, is dabbed lightly on several slides, which are then allowed to dry.

Before drying is complete the material on one of these slides is covered with a cover-glass and the Florence test applied. The Florence test reagent is as follows:

Potassium iodide	..	..	1.5 g.
Iodine	..	..	2.5 g.
Water	..	..	30 ml.

A drop of this solution is allowed to run under the cover-slide. In the presence of seminal material, large numbers of brown crystals, small at first but becoming larger, will be seen to form throughout the field. Under high power one or more spermatozoa may also be seen, stained brown by the iodine, in which case, of course, the test can be regarded as conclusive. More often, however, it will be necessary to stain one or more of the other smears which have been prepared. These will now be dry, and they should be fixed by passing them over a flame. Many stains have been recommended for the demonstration of spermatozoa, but the routine haematoxylin and eosin staining is quite satisfactory. In many stains the stained spermatozoa may be numerous and easily seen, but a prolonged search is often necessary. The recognition of separated heads and tails is possible, but it is advisable to search until at least one undoubted intact spermatozoa is seen. In order to avoid damaging the spermatozoa the need for gentleness in handling the stain must be emphasized, especially in transferring material to slides or in teasing the material, if this has been considered necessary.

The same staining methods are of course applicable to any smears prepared from material taken from the vagina.

The clothing of the suspected person must also be examined, and, while the presence of seminal matter may not be significant, its position may be, and it must be remembered that the blood group of an individual can often be determined from seminal stains. It is fre-

quently possible, therefore, to determine whether the seminal stains on the clothing of the suspect have the same content of group-specific substances as the seminal stains on the clothing of the victim, and this may furnish a valuable additional piece of evidence. Grouping tests of seminal stains must be done by indirect absorption methods and are a matter for the expert.

COLD WEATHER CLOTHING FOR KOREA

[FROM A SPECIAL CORRESPONDENT]

During the winter of 1950-1 British soldiers in Korea were provided with a full range of special clothing, and the casualties from cold were not numerous when allowance is made for the very severe climatic conditions to which these men were exposed. The number of such admissions to hospital for the period November, 1950, to February, 1951, was 120, of which 66 were diagnosed initially as frost-bite, 37 as trench foot, and 22 as exposure conditions. The trench-foot cases were considered to differ from the classical condition encountered in Flanders in 1914-18. The frost-bite cases were almost entirely confined to the lower extremity, and although several men lost one or more toes there were no extensive mutilations; 14 men were evacuated to the United Kingdom because of frost-bite, and in about half of all the cases a temporary lowering of medical category was necessary. Their average length of stay in hospital was 33 days.

As a result of the experience gained last winter great efforts have been made to improve the winter clothing, and many new garments have been sent to Korea. A basic range of special clothing for "cold/wet" conditions has been provided. The term "cold/wet" covers those fluctuating climatic conditions in which the temperature is sometimes above freezing-point and sometimes below. When "cold/dry" conditions are encountered, extra or alternative garments are available. The cold/dry climate can be described in general terms as that in which the true winter temperatures are almost continually below freezing-point.

Principles of Design

The principles on which the design of the clothing is based are (a) provision of a water-repellent windproof external layer made of a "ventile" cloth; (b) the use of the layer system so as to take advantage of the high insulating value of air; (c) the provision of adequate ventilation; and (d) limitation of bulk to prevent interference with the military efficiency of the wearer.

Good ventilation is vital, as sweat condensing on the body causes loss of heat, and condensation on the inner clothing lowers its insulating value. The soldier must be able easily to open and close the apertures at the sleeves, neck, ankles, and down the front of his garments.

Clothing for Cold/Wet Conditions

In cold/wet conditions the underclothing for the upper half of the body consists of a string vest, a loosely fitting flannel shirt, and a heavy woollen jersey. The jersey may be replaced by a "combat smock liner" which is now being developed; it is a camel-fleece garment with a front that can be unbuttoned to ensure ventilation. Underclothing for the lower half of the body consists of "drawers, pyjama type," which are made of a cotton knitted fabric with an elastic waistband. There is a back opening which allows the performance of bodily functions while exposing only a minimum area of the body. Outside the drawers are worn "trousers, inner," made of a heavy knitted wool.

The outer clothing consists of a combat smock and trousers (Fig. 1), made of a windproof gaberdine material, lined throughout, reinforced at the elbows, seat, and knees.