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VAGINAL DISCHARGES

By ALAN BREWS

The opening paper to a discussion on this subject by the Medical Society for the Study of Venereal Diseases, at 11 Chandos Street on January 29th, 1937.

MR. PRESIDENT, LADIES AND GENTLEMEN,—I will begin by thanking you for the compliment you have paid me in asking me to open this discussion this evening on "Vaginal Discharges." As I possess no special knowledge of any particular aspect of this subject, such as I might have claimed had I been carrying out some special line of research, I can only conclude that those whom you have empowered to issue this invitation must have expected me to survey this subject briefly from the outlook of a junior clinical gynaecologist.

This I will endeavour to do, and I would like to emphasise at once that I will state my own views rather than make any attempt to epitomise the vast literature bearing on the subject. Admittedly, my views are immature and I do not hesitate to reserve the right to alter them, either as the result of what I may learn from you in the subsequent discussion, or following the publication of further researches by those working on this subject. I will not apologise for being very elementary, as I am a firm believer that it is by crystallising our ideas and by simplifying our methods of diagnosis and treatment that we can best hope to advance our knowledge.

I construe my terms of reference to mean the spontaneous escape from the genital tract of a humour in amount sufficient to soil a vulval pad or the under linen of the patient. Under this broad definition I classify vaginal discharges as follows :—

CLINICAL CLASSIFICATION OF VAGINAL DISCHARGES

- (1) Lochial Discharge.
- (2) Simple Leucorrhœa.

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- (3) Inflammatory Discharge.
- (4) Discharge from Neoplasm.
- (5) Adventitious Discharge.

LOCHIAL DISCHARGE

- A. Menstrual.
- B. Following an Abortion.
- C. Following Labour.

Varieties

Normal

- Lochia rubra.
- Lochia alba.
- Lochia serosa.

Abnormal

- Suppressed, defective or retained.
- Excessive.
- Purulent.
- Gangrenous.

Lochial Discharge.—I would emphasise that menstruation is in fact the monthly abortion of an unfertilised ovum, and that the loss during the first two or three days is probably synonymous with the loss during the abortion of a fertilised ovum or during the third stage of labour. The red discharge of the latter part of a menstrual period is synonymous with the Lochia rubra of the early puerperium following an abortion or labour. In the normal puerperium following labour or an abortion the red lochia is followed, for a variable number of days, by a white lochia, which gradually becomes colourless and serous in character. This is the result of the normal aseptic healing of the lining of the uterus. To my mind it follows that a physiological white or serous discharge may be expected following a normal menstrual period, that is, in the latter part of the puerperium following the abortion of an unfertilised ovum. Should such a discharge be rather profuse it may well be regarded as a recrudescence of some latent infective condition.

It is also of practical importance to emphasise that the white lochia following the abortion of an unfertilised ovum (menstrual period) normally contains a large number of polymorphonuclear leucocytes, and is there-

fore indistinguishable in a film from pus resulting from the recrudescence of uterine infection.

SIMPLE LEUCORRHOEA

Possible Origin

- (a) Peritoneum.
- (b) Fallopian tube.
- (c) Body of uterus.
- (d) Cervical canal.
- (e) Vagina.
- (f) Vulva.

Ætiology

- (a) Variation of the normal.
- (b) Psychological.
- (c) Hormonic dysfunction.
- (d) Secondary to pelvic congestion (sedentary life, constipation, pregnancy, prolapse, pathological lesion).

Simple Leucorrhœa.—Simple leucorrhœa I would define as an excess of the normal secretions of the genital tract, and I would emphasise that just as is the case with other natural secretions, such as the saliva, gastric juice or the urine, there are individuals who normally have genital secretions in excess of the average, in the complete absence of any disease. The inconvenience of such excessive normal secretion is accentuated by obesity, undue moisture of the skin, careless local hygiene and undue fastidiousness on the part of a patient. The condition is likely to be accentuated rather than relieved by the majority of local applications and treatment which are only too frequently prescribed.

Secondly, in the lower mammals œstrus, which is frequently associated with a sanious vaginal discharge, coincides with ovulation. The œstrus bleeding of the bitch and the menstrual bleeding of the primates are two different processes, the first occurring through a practically intact membrane by diapedesis, whereas in the latter there is a coagulation necrosis and sloughing of a greater part of the endometrium. So-called interval bleeding does occur in some women at the time of ovulation, half-way between two monthly periods, probably under the influence of œstrin, whereas menstruation

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results from the withdrawal of œstrin and progestin, when some as yet unknown outside factor, probably pituitrin, brings about the constriction of the blood vessels and ischæmic necrosis of the endometrial tissues, followed by very molecular disintegration.

In some animals there is no escape of blood at the time of œstrus, but only a white or mucoid discharge. In women sometimes we find an analogy to both these conditions, the interval bleeding at the time of ovulation which I have mentioned, or a white or mucoid discharge at the same time. Here, again, the knowledge of its existence will largely eliminate the possible error of regarding it as evidence of disease.

INFLAMMATORY DISCHARGE

- A. Traumatic.
- B. Thermal or chemical.
- C. Infective.
 - (a) *Specific*.
 - (i.) Tuberculous.
 - (ii.) Venereal diseases.
 - (iii.) *Trichomona vaginalis*.
 - (b) *Pyogenic*.

Inflammatory Discharge.—The first two special headings need little comment. There is no question that foreign bodies, such as ring pessaries and contraceptive appliances worn for any length of time cause inflammatory discharges. I am personally strongly opposed to intra-uterine contraceptive appliances that are worn for long periods at a time. I would only countenance their use in patients who have definitely had all the children that they desire, and who understand that such an appliance implies a definite risk of creating an intra-uterine infection that may ascend higher.

In discussing gonorrhœa in gynæcological practice, I would remind you that my chief and senior colleague, Mr. Eardley Holland, addressed your Society on this subject in April, 1934. Some of the points he then made were :—

- (i.) That 10 per cent. of his new patients complained of vaginal discharge.
- (ii.) That 6 per cent. of his new patients had a “ chronic cervix.”

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(iii.) That there had been a drop of about 50 per cent. in the number of cases of tubo-ovarian infection treated surgically at the London Hospital from that present ten years previously.

(iv.) That the gynæcologist should be an adept at the diagnosis of venereal disease, but he favoured the transfer of all cases to a whole-time venerealogist for further investigation and treatment.

During the last few years I have been attempting to put into practice Mr. Holland's suggestion that a gynæcologist should be an expert diagnostician of venereal disease. The following table will give you an idea of the sort of results I have been obtaining at one of my hospitals, where I hold an out-patient clinic regularly twice a week.

Bacteriological Investigations in my Out-patient Clinic at the Soho Hospital for Women during 1936

Total New Patients, 974

Blood Serum.—82 patients.

W.R. +ve 3 times . 3.6 per cent.

G.F.T. +ve 6 times . 7.2 „

Films Urethra and Cervix.—56 patients.

Gonococcus +ve 3 times 5.3 per cent.

Vaginal Secretions for Trichomona Vaginalis.—81 patients.

27 positive reports . 33½ per cent.

Cultures, Urethra and Cervix.—78 patients.

Gonococcus +ve 7 times 9 per cent.

There are many real obstacles to the gynæcologist becoming really reliable in the diagnosis of venereal diseases, among which I would mention firstly the difficulty of organising a reliable bacteriological technique and the difficulty of obtaining reliable reports when the technique is in operation. The chief necessities of a good technique I regard as :—

(i.) A suitable lithotomy table.

(ii.) Suitable culture media obtainable fresh at frequent intervals.

(iii.) A suitable incubator, easy to manage and reliable.

(iv.) Rapid transit at a proper temperature to a bacteriologist expert in venereal diagnosis.

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Secondly, the immense certainty placed in a positive finding and the relative uselessness of a single, or even several, negative findings.

My own clinical impression has been that the majority of my positive findings have been in cases where the diagnosis clinically was relatively obvious; in other words, in cases where a careful and discerning general practitioner would probably have sent the case direct to the venereologist rather than to the gynæcologist. The greatest problem of the clinical gynæcologist in dealing with venereal disease is the case of chronic infection referred to him by the general practitioner because he is suspicious of a possible venereal infection, but does not like even to suggest the possibility until positive bacteriological findings are available, and the cases of chronic infection of the upper and lower genital tract which ought, more often than not, to be gonococcal, but which, even when referred to the venereologist for repeated investigation, result only too frequently in entirely negative findings.

To my mind the real solution of the problem lies in the development, as soon as we possibly can, of complete co-operation between the gynæcologist and the venereologist to an extent that will allow of adjacent clinics with communicating doors, working at the same hours.

The relatively recent reincarnation of the *Trichomona vaginalis* has certainly convinced me of the fact that in the adult woman subacute chronic infections of the vagina are almost as common as similar infections of the cervix, and more common than similar infections of the urethra or vulva. I have certainly had satisfactory clinical results in treating cases where this organism has been isolated with the various acid applications, arsenical and otherwise, which have been advocated by various clinicians. I regard it as a primary infective disease, because the presence or absence of this organism forms a convenient clinical index for advising treatment and controlling progress. In this connection I bear in mind, however, the findings of King and Mascall published in the *Lancet* in 1935, that trichomona and gonococcal infections frequently coexist, and that the presence of the former organism makes the isolation of the latter much more difficult.

Finally, I must confess that at the present time I am diffident in referring to the venerealogist some woman happily married for many years, where my investigation has revealed perhaps only a + or $\pm$ gonococcal fixation test, or even some cases of a similar type that may be called gonococcal carriers rather than sufferers from the disease. I would, however, welcome the advent of a system whereby I could consult with one of you as a colleague in a room adjacent to my clinic.

The system you have built up for tracing contacts is sometimes perhaps a little ruthless in its efficiency. I think some segregation of different types of patient is desirable, and that it is a duty of all of us to see that our junior clinical assistants do not thoughtlessly cause unnecessary psychological suffering to patients through a careless or hasty remark or a badly phrased question. Many such blunders are, I well know, the result of overwork and the necessary haste which such entails.

DISCHARGE FROM NEOPLASM

(1) *Benign and Non-ulcerating Malignant*.—(Discharge serous, mucoid and frequently sanious.)

(2) *Sloughing Benign and Malignant Ulcerating*.—(Discharge sanious, irritating, very offensive.)

Discharge from Neoplasm.—Regarding malignant neoplasm, I would quote the following facts as being, I believe, of particular interest to the members of this Society:—

In the years 1929 and 1930 a total number of 71 cases of carcinoma of the cervix uteri were treated in the Gynæcological Department of the London Hospital. Of these the great majority complained of abnormal bleeding or of definitely sanious discharge from the genital tract. However, 6, that is 8.4 per cent., complained of nothing but a persistent increasing yellow discharge. In some cases this was intermenstrual, in others post-menopausal. These cases had no abnormal bleeding of any kind which would suggest the possible presence of a neoplasm.

ADVENTITIOUS DISCHARGE

A. Sinuses.

B. Fistulæ.

Adventitious Discharge.—This group I include for the sake of completeness. The majority of sinuses leading

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from pelvic abscesses which have ruptured spontaneously or have been opened artificially, and of fistulæ between the genital tract, and are therefore easy of diagnosis. Occasionally, however, such a sinus or fistula opens into the genital tract above the level of the external os, and is then very difficult to diagnose. No local treatment will, of course, be of any value that does not deal with the sinus or fistula.

In conclusion, Mr. President, Ladies and Gentlemen, I would make a strong plea for simplification and greater uniformity in the teaching of this subject in the future. It should be emphasised that where possible exact diagnosis should always precede treatment. The real relative frequency of venereal and non-venereal discharges can only be ascertained by the development of a much closer co-operation between the venerealogist and the gynæcologist than exists at the present time.