REFRESHER COURSE FOR GENERAL PRACTITIONERS

MENORRHAGIA

BY

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A woman having an issue of blood twelve years, which had spent all her living upon physicians, neither could be healed of anyone.—St. Luke viii. 43.

Definition

Menorrhagia is an excessive increase of the menstrual loss. The increase may result from a heavier flow during a period of normal length or from prolongation of the period. The term "menorrhagia" is often used loosely to describe irregular or excessive bleeding which is not confined to the menstrual period; but this is not correct. In this article the above definition is accepted. It will be apparent immediately that the words "excessive increase" are not precise, and for that reason the definition itself fails in this respect, but the problem which the doctor has to solve when treating menorrhagia is also not a precise one. Indeed, it is almost infinitely variable. A woman who has been accustomed to using three diapers a day finds that she requires five and complains, perhaps with reason, of an excessive loss. The next patient may need eight or nine diapers but considers this normal because her loss has been of this order since the menarche. She has become accustomed to it and does not consider it excessive.

It must be emphasized at the outset that menorrhagia is not a clinical or pathological entity but always a symptom. Thus there is no treatment for menorrhagia, but only for the underlying cause and for the resultant anaemia. The immediate reaction of many who read or hear this statement for the first time is to dispute its accuracy. They refer perhaps to long years of experience with ergot, quinine, or strychnine, and say that these or other drugs have almost invariably been successful in the treatment of menorrhagia, and that it is only the exceptional case, in which these fail, that demands further investigation or treatment. It should be remembered, however, that it is "the exceptional cases" collected from many general practices which keep our hospitals full and add to the length of already overlong waiting-lists. It is as illogical to give ergot to every woman who bleeds excessively as it is to give a linctus to every patient who complains of a cough.

What, then, is the problem of menorrhagia as it has to be solved by the general practitioner? His first task is to obtain the history and assess the severity of the trouble. This may show that there is no cause for anxiety and that reassurance is all that is necessary. If further investigation of the menorrhagia is required his second task is to determine the cause; his third task is to decide on treatment and then administer it.

History and Severity of the Menorrhagia

When information is collected on these two points the cause of the trouble is often made clear. The appearance of an anaemic patient complaining of menorrhagia gives positive proof of the severity of the bleeding, but it should be remembered that, whereas the anaemia is usually the result of the menorrhagia, occasionally the reverse is true, and with a primary anaemia or other blood dyscrasia such

as leukaemia the menorrhagia may be caused by the underlying blood condition. The history of the complaint is of great importance, and the few minutes used collecting and recording accurate details is time well spent.

The questions requiring an answer are: When did the trouble begin? Did it follow some major incident such as an abortion, delivery, or illness? Has it progressively increased? Have there been associated signs and symptoms with particular reference to pain, intermenstrual discharge or bleeding, or abdominal enlargement? Has there been any associated menstrual irregularity? Is it associated with infertility? The importance of these several points are considered in more detail.

Post-abortion or Post-natal Menorrhagia.—The most common causes of this are retained products of conception and retroversion. In the case of the former an intermenstrual brown discharge is common. In the latter the retroversion is associated with subinvolution and chronic pelvic congestion. This, more than the misplacement itself, is responsible for the menorrhagia.

Menorrhagia Following an Illness.—This is common and is probably due, in part at least, to the general atonicity of the convalescent. With improvement in the health of the patient the menorrhagia decreases until normal function is restored. Tonics with strychnine or iron speed the recovery.

Progressively Increasing Menorrhagia.—This always implies an underlying pelvic lesion, and the two most commonly responsible for this symptom are uterine fibroids and pelvic endometriosis. An increasing menorrhagia with fibroids always suggests that one or more tumours are becoming submucous. If endometriosis is responsible for the bleeding, associated pain, which is characteristic in that it is premenstrual and progressive until the flow starts, is nearly always present. Then there is relief until seven to ten days before the next period begins. The pain is due to congestion of the areas of ectopic endometrium, and its site varies with the distribution of these. If they involve the uterus the pain is felt in the midline of the hypogastrium. If the utero-sacral ligaments, recto-vaginal septum, or pouch of Douglas are involved the pain tends to radiate into the sacrum or sacral area of the back, and is often associated with pain on defaecation and dyspareunia. Bleeding per rectum may occur even at the time of the menstrual loss.

Menorrhagia Associated with Pelvic Pain, Discharge, and Abdominal Enlargement.—This, like progressively increasing menorrhagia, always suggests an intrinsic pelvic lesion. The nature and site of the pain give a guide to the diagnosis. A midline hypogastric pain suggests its uterine origin. An acquired progressive premenstrual dysmenorrhoea, with pain referred to this site and associated with progressive menorrhagia, is typical of adenomyosis (endometriosis of the uterus). On the other hand, a colicky pain referred to this site during menstruation, and associated with menorrhagia, suggests a uterine fundal polyp or a submucous fibroid becoming extruded as a polyp.

The pain is due to uterine contractions endeavouring to expel the tumour. Pain that is referred to the iliac fossae or sacrum and is premenstrual and congestive in type suggests either chronic inflammatory adnexal disease or endometriosis as already described. Endometriosis is also suggested by premenstrual rectal pain or deep-seated dyspareunia occurring only in the premenstrual phase of the cycle.

When progressive menorrhagia is associated with a blood-stained intermenstrual discharge the suspicion is raised of uterine ulceration involving either the cervix or the body of the uterus. Such ulceration is usually malignant and due to either cervical carcinoma or carcinoma of the corpus. The former is common before the menopause, but the latter is relatively rare. Sometimes this ulceration is due to tuberculous endometritis, which is now known to be much more common than was until recently believed. Vaginal smears, taken preferably in the intermenstrual phase, may reveal malignant cells, and in the same way cultures of the menstrual flow may grow the tubercle bacillus. As positive results are the only significant ones, the limited scope of these tests in general practice should be realized. It must be emphasized that negative results from vaginal smears or cultures do not exclude the presence of carcinoma or tuberculosis. When menorrhagia is associated with abdominal enlargement fibroids are usually responsible.

Menorrhagia with Associated Menstrual Irregularity.—This always suggests hormonal dysfunction with disturbance of the pituitary-ovarian cycle. The absence of pain is a characteristic feature of such bleeding, which is most common at the menopause but may occur at any time before this, even at puberty. The presence of other conditions such as fibroids should not mislead the clinician when assessing the cause and effect in these cases. It is a sound clinical rule that fibroids do not cause irregular bleeding, and, conversely, that the removal of fibroids cannot be expected to cure such bleeding. This statement should be contrasted with that made earlier to the effect that fibroids can be a cause of progressive menorrhagia.

Menorrhagia and Infertility.—The importance of this relationship depends on whether the patient is trying to conceive or trying not to. In the former case it often happens that the condition responsible for the menorrhagia is also a factor in causing infertility. This could apply to subthyroidism, a submucous fibroid, endometriosis, chronic inflammatory disease of the adnexae, or endometrial tuberculosis. In general practice menorrhagia associated with infertility is more commonly due to pelvic congestion resulting from coitus interruptus than to any other cause. A note of warning is necessary. Patients suffering from this syndrome usually deny the use of contraceptive methods but admit that they do not want a child. To a further question they will state that the husband "is careful."

It will be apparent from the above that by adopting a systematic and logical method of history-taking the relevant information can be obtained in a few minutes, and in a large proportion of cases the provisional diagnosis will be clear before any physical examination is made.

Determining the Cause

A satisfactory explanation of the symptom of menorrhagia can practically always be found, though to do so may in certain cases require such accessory aids to diagnosis as blood examinations, cervical or endometrial biopsies, curettage with exploration of the uterine cavity

for polypi or submucous fibroids, and even x-ray examination of the uterus after the injection of radio-opaque materials. Ideally the cause should always be determined, but circumstances make this almost impossible in general practice. It is necessary therefore to have some guiding principles that will help in the selection of those cases which require further investigation and those which can with safety be treated empirically.

The first principle is that every woman who complains of menorrhagia must be examined carefully. This sounds axiomatic, but it is well known that sometimes there is a temptation during a busy surgery to prescribe ergot and iron without examining the patient. In addition to a general assessment of the patient's health, both the abdomen and the pelvis should be examined. Pelvic examination requires exposure of the cervix with a speculum and good illumination as well as a careful bimanual assessment of the pelvic viscera. The haemoglobin and red cell count should be determined, and if there is reasonable doubt concerning a primary blood dyscrasia (as, for example, if splenomegaly, hepatomegaly, or purpuric areas are found) the blood film should also be studied, and probably a sternal-marrow puncture will ultimately be required. Therefore to make the necessary examination in these cases an appointment may be required for a time less busy than the surgery hours.

If the examination reveals an apparently healthy pelvis with a uterus and adnexae which are normal in size, in good position, and mobile, and there is no blood on the examining finger, and no intermenstrual blood-stained discharge as disclosed by the history, the patient could with safety be treated expectantly. Menorrhagia in such cases usually follows an illness, is due to emotional strain or physical fatigue, or is associated with constipation or unsatisfactory contraceptive techniques. Correlation of the history and the negative pelvic findings will help to determine the primary cause of trouble. Progress should be watched carefully over a period of three months, and it is wise to use the haemoglobin level as a check on the clinical opinion.

If the examination reveals a mobile retroverted uterus in a parous woman, and particularly if the menorrhagia is of post-natal or post-abortion onset, the uterus should be manipulated into the anteverted position and maintained there by a Hodge pessary for three months. During this time the patient can be treated expectantly as described later. Uterine manipulation and the insertion of pessaries should not be employed in nulliparous women. Retroversion in such cases is usually of congenital origin and is not of itself a cause of menorrhagia. When gross constipation makes an accurate assessment of the pelvis impossible it should be remembered that this condition can itself produce menorrhagia. Steps should therefore be taken to regulate bowel action, and the case can be reviewed in a month or two. In the meantime iron is given as described below.

In all cases in which there is associated intermenstrual bleeding the exact cause of this, and of the menorrhagia, should be determined by curettage or biopsy before treatment is prescribed. It is advisable that this investigation should be performed by the gynaecologist who would have responsibility for the patient should the investigation reveal a carcinoma or other serious condition requiring more radical treatment.

In all cases in which the menorrhagia is found to be associated with demonstrable lesions in the pelvis, expectant treatment should not be carried out by a general

practitioner without a second opinion from a gynaecologist. The correlation of the details of history with the pelvic findings will in a high percentage of cases enable the practitioner to make an accurate provisional diagnosis, but the final decision on treatment is best made in consultation with a gynaecologist. If the loss is enough to warrant the patient staying in bed the case is not one for expectant treatment but requires further investigation.

Treatment

In the group in which the menorrhagia is associated with new growths or inflammation of the pelvis the treatment is that of the underlying condition and does not come within the scope of this article. Post-abortal and post-natal menorrhagia are usually best treated by a curetage. If the uterus is retroverted it should be replaced and a Hodge pessary inserted for three months.

When there is reason to believe that ill-advised methods of contraception are responsible, the reason for the trouble should be explained, preferably to both husband and wife. This interview will often result in their deciding to have a child. If it does not, they can be given the contraceptive advice they require.

In all those cases in which the expectant attitude is adopted it should be remembered that unless there is a pronounced improvement within three months the case should be reassessed and, if necessary, a further opinion sought. Every effort should be made by the patient to take as much rest as possible and to avoid constipation on the eve of the period and during its first two or three days. On the morning of the days of heavy loss, usually the second and third days of the period, 1 dr. (3.5 ml.) of liquid extract of ergot or 0.5 mg. of ergometrine is given by mouth. If a second dose is required within 24 hours the loss is too great to justify continuation of the expectant attitude. Iron should not be taken while bleeding continues, as it sometimes increases the loss, but when the period ends it should be taken regularly until the next one begins. This routine should be continued until the menorrhagia ceases and the blood picture has returned to normal. Strychnine tonics are of value in these cases.

Hormones have a very limited place in the treatment of menorrhagia. There is the rare case in which even severe bleeding is due to subthyroidism, and, when the clinical picture suggests this, thyroid should be given: 2-3 gr. (0.13-2 g.) daily at first, increasing as necessary, using the pulse rate and weight as guides to tolerance. Where facilities exist for determining the basal metabolic rate this should be estimated. When menorrhagia is associated with irregular bleeding, and no lesion is detected in the pelvis, oestrogenic hormones can be tried.

The stilboestrol routine is to give 1 mg. daily, starting as soon as a period ends and continuing for 21 days. It is then discontinued until the end of the next period, when the same routine is adopted. If menstruation has not returned to normal within three months the case requires further investigation. Stilboestrol may also be given to shorten a heavy and prolonged period, and in such cases it should be started on the third or fourth day of the period in daily doses of 2-3 mg., but when bleeding ceases the routine outlined above should be followed for a further 21 days.

Testosterone can be used in these cases instead of oestrogenic hormones. An intramuscular injection of 25 mg. of testosterone propionate is given weekly for four injections, beginning as soon as the period ends. Alternatively 10 mg. of methyl testosterone can be given daily

by mouth throughout the cycle for two months, or a testosterone vaginal pessary (15 mg.) can be inserted daily for five days before the period is due. Androgen therapy should not be prolonged in view of the risk of producing masculinizing effects such as hirsutism, voice changes, and clitoral hypertrophy. If the menorrhagia is not controlled in three months the case should be reviewed and, if necessary, a second opinion obtained.

Neither the gonadotrophic hormones nor progesterone have justified their general use in the treatment of menorrhagia, though they may be prescribed in selected cases after consultation with a specialist. In intractable cases a useful method of administering the gonadotrophic hormones is to give a transfusion of Wassermann-negative and rhesus-compatible blood from a pregnant woman.

Menopausal Menorrhagia

As this is so common in general practice special mention will be made of it. It should be remembered that when a menopause is normal menstruation behaves in one of three ways: it ceases abruptly; it decreases slowly and progressively; or it becomes irregular with a decreasing loss and increased intervals between.

All other behaviours, including menorrhagia, should be regarded as abnormal, and there is no place for the expectant attitude to this symptom at the menopause. Patients of 40 or over complaining of an excessive loss, too frequent bleeding, or an intermenstrual blood-stained discharge require a full gynaecological investigation by a specialist. A pelvis which is perfectly normal on examination may still be the site of an early endocervical or corporeal carcinoma. If no such lesion is found and it is decided that the menorrhagia is of hormonal origin the question of whether to try the effect of the treatment already described or to advise surgery or the induction of a radiation menopause is one on which no general advice can be given. Each case must be assessed on its own merits and a decision made in consultation with a gynaecologist.

Summary

Menorrhagia is a symptom for which the cause can almost always be determined.

Every patient complaining of menorrhagia should have a general and pelvic examination.

In general practice, when time and facilities are not always available for the full investigation of a case, it is reasonable to give treatment empirically for three months if the examination discloses nothing abnormal and there is no intermenstrual bleeding.

If there is not a pronounced improvement at the end of three months the case should be reassessed and a further opinion obtained.

Expectant treatment should never be given when there is intermenstrual bleeding, something abnormal in the pelvis, or when menorrhagia occurs at the menopause.

Expectant treatment consists in combating anaemia with iron, controlling the loss with ergot, and giving oestrogenic or androgenic hormones to regulate gonadal activity.

A study of the health services for children in Britain will be made by Dr. Francisco Manchaca, Director of the Children's Hospital, Santa Fe, Argentina, during a six-weeks visit arranged by the British Council. Dr. Manchaca practised in Santa Fe before becoming director of the social service school of the Ministry of Public Health and Labour in Santa Fe Province. He now combines the direction of the children's hospital with teaching child and maternal hygiene in the recently established school of public health in Santa Fe.