Current Practice

OBSTETRICS IN GENERAL PRACTICE

Minor Disorders of Pregnancy

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The minor disorders of pregnancy may be classified as follows :

DISORDERS DUE ENTIRELY TO THE PREGNANCY

Frequency of micturition	Cramp
Heartburn and dyspepsia	Paraesthesiae
Fear of abnormal foetus	Abortion (which will be treated separately in another article in this series).
Vomiting.	
Mild toxaemia	

DISORDERS AGGRAVATED BY THE PREGNANCY

Anaemia	Urinary infections
Discharges	Backache
Constipation	Sleeplessness
Varicose veins	Hiatus hernia
Haemorrhoids	Essential hypertension.

DISORDERS COINCIDENT WITH AND REVEALED BY THE PREGNANCY

Migraine
Unsuitable nipples

In this paper I propose to consider each of these minor disorders in turn.

Disorders Due to the Pregnancy

Frequency of Micturition

By frequency is meant not only the need to pass urine more often during the day but to get out of bed at least once a night. Frequency is due to changes in the transitional epithelium of the trigone of the bladder. It usually requires no treatment beyond warning the patient to cut down her drinking in the evening but not her overall intake of fluids.

Heartburn and Dyspepsia

Surprisingly these symptoms are just as frequent in late as in early pregnancy. As sodium salts may predispose to pre-eclamptic toxaemia, they are not advised and certainly not in the last three months of the pregnancy. Initially magnesium trisilicate in a dose of ½ oz. (15 ml.) three times a day after meals should be given. If this fails, aluminium hydroxide is a useful alternative either as one tablet three times a day after meals, or in the fluid preparation. It should be remembered that dyspepsia and heartburn occurring in late pregnancy may well be the symptoms of hiatus hernia.

Fear of an Abnormal Foetus

Nowadays, many patients are averse to taking any tablets in the early months of pregnancy. The tragic thalidomide episode has focused attention on what has always been a major anxiety of the pregnant woman. The first question a mother asks after delivery is invariably—" Is it all right ? " In other words, is there any abnormality ? Since foetal abnormality occurs in 1 in 50 babies the presence of this fear during pregnancy is by no means unreasonable. Sometimes it is very difficult to dispel it. It is important to inform the patient that about 98 out of every 100 babies are " all right." If sleep is being seriously disturbed, the best one can do is to offer hypnotic tablets. The physician can do most good by listening to the patient's account of her fears rather than by talking himself. Even so, there is a limit to what can be done to relieve her mind. This natural anxiety cannot be completely cured until the baby has been delivered.

Fears in pregnancy are often not voiced spontaneously, so it is helpful to give the patient a little encouragement to talk. One of the most reassuring things for her, even though she has felt the baby kick, is to be allowed to listen to the foetal heart. It is easy to let her do this if the standard diaphragm stethoscope is fitted with long rubber tubing. Hearing a few foetal heart beats does more to reassure a patient than a thousand words from her medical adviser. It is worth watching for the smile that comes on the patient's face on these occasions.

Vomiting

Vomiting in early pregnancy is almost physiological. The thalidomide tragedy must have markedly affected the consumption of antihistaminic drugs for this condition although thalidomide was not an antihistamine. The antihistamines " avomine " (promethazine theoclate) and " phenergan " (promethazine) in particular have been given in many millions of doses and there has been no definite evidence of any relationship between foetal abnormality and their administration. It would appear that foetal abnormality is unlikely to develop from any drug given after the fourteenth week of the pregnancy. To administer antihistaminic drugs in the dose of one tablet three times daily, reducing the dose gradually to one only at night, is certainly justifiable. An old-fashioned but sometimes effective remedy is to give the patient a few drops of spirituous tincture of a fruit juice to suck on a lump of sugar. Tinct. aurantii 10 to 15 minims (0.6–0.9 ml.) may be worth trying. If vomiting is so severe that dehydration has occurred or acetone bodies have been found in the urine, the condition is no longer a minor one.

Mild Toxaemia

Toxaemia of pregnancy will be the subject of another article but very minor degrees can occur. It is important however to attempt to make a diagnosis as early as possible. The general practitioner is in an exceptionally favourable position for doing this because he sees the patient first in the

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pregnancy and frequently has seen her for months or even years before the pregnancy started. The three criteria on which even mild toxaemia is diagnosed are rise in blood-pressure, albuminuria, and increase in weight due to oedema. It is well worth while for the sake of the record to take a blood-pressure reading in every young woman when she is not pregnant because that gives one a base line on which to judge the severity of what is happening to her during pregnancy. This is obvious when one considers that a *rise* in blood-pressure is so much more important for the diagnosis of toxaemia than an initial high reading.

Blood-pressure readings are not the only sign of toxaemia but they are the most reliable. Oedema may occur without toxaemia, particularly in the late afternoon in hot weather, while albuminuria may be caused by urinary infection as well as toxaemia.

Cramp

In pregnancy cramp is common. It is sometimes due to the patient being over-enthusiastic in sticking to a low-salt diet, so that occasional cramp coming on in late pregnancy may be treated, in the absence of toxaemia, by telling the patient to add a little more salt to her food.

Sudden cramp in the calf coming on at night can often be dramatically relieved by the simple expedient of the patient's sitting up and pulling hard on her toes. This is often more effective than massage of the cramped muscle. Calcium gluconate gr. 5 (325 mg.) (up to 10 tablets can be chewed during the course of a day) together with "becosym forte" (one tablet should be swallowed) sometimes also help to relieve cramp. The use of an electric pad or blanket on the affected muscles is also valuable in persistent cases.

Paraesthesiae

This is common in later pregnancy. It may be due to oedema in the carpal tunnel or to postural effects. In any case, if it disturbs sleep, heavy sedation must be given and the patient must be told that she should not carry large shopping baskets or heavy weights, such as the other children. A shopping basket on wheels is of practical help. It may also be of help to give one tablet of chlorothiazide every second day for three or four days. This lessens the oedema in the carpal tunnel, but diuretics are double-edged weapons in pregnancy because they mask the signs of toxaemia.

Disorders Aggravated by the Pregnancy

We now come to the second group of minor disorders—those aggravated by the pregnancy.

Anaemia

Anaemia may (1) exist before the pregnancy has started; (2) be caused by the demands of the foetus on the mother; or (3) have existed in a sub-clinical form and be aggravated by the pregnancy.

Patients with a haemoglobin level of over 90% do not need iron. The level should however be checked for a second time at the 32nd week of the pregnancy. Where the haemoglobin level is between 70% and 90% (approximately 10.5 to 13.5 grammes per 100 ml.) any of the standard oral iron preparations—one tablet three times a day after meals—should be given, with a reminder to the mother that such tablets are poisonous for children and should be kept out of reach. Where the haemoglobin level is below 70% it should be routine for a blood smear to be requested. This is the minimum diagnostic procedure required to elucidate anything about the type of anaemia with which one is dealing. When the haemoglobin level is below 50% the condition is no longer a minor one in pregnancy and will be discussed in another article. It will be profitable, therefore, to concentrate our attention on those patients with a level of about 70% (10.5 grammes per 100 ml.). An attempt should be made to discover whether the deficiency is due to under-nutrition, eating the wrong kinds of foods, or to small haemorrhages from haemorrhoids or from the gums.

Smoking contributes to malnutrition in two ways. The mother spends some of her housekeeping money on cigarettes and feeling guilty cuts down her own portion of the food rather than deprive her children. Smoking also diminishes appetite. To dissuade the mother from smoking it is best to point out that this habit can damage the foetus. There have been enough scientific papers to show that the average birth weight of babies of heavy smokers is lower than that of other women. No mother can be persuaded to stop smoking because she is told that smoking is bad for her own health, but arguments about the baby's health will sometimes work.

Certain foods are richer in iron than others: these are eggs, beef (especially topside), certain fishes, and vegetables such as butter beans, lentils, peas, and spinach. "Bovril," cocoa, "Oxo," and "Virol" all contain large and easily absorbed quantities of iron.

A few gynaecologists now routinely give folic acid to all pregnant mothers. More administer it only to those mothers who have been investigated to exclude pernicious anaemia. The particular investigations carried out vary in different laboratories. The risk, of course, is that folic acid routinely administered to all mothers may cause subacute combined degeneration of the cord in the rare mother who has pernicious anaemia.

Iron intolerance causing nausea or constipation or diarrhoea should be treated by changing to another oral iron, as some patients tolerate one preparation much better than another. Several preparations may therefore have to be tried. Intravenous iron can be very dangerous and fatalities have been reported from its use. It should never be given except after a test dose. The patient should be kept in the surgery for at least half an hour after this test dose, since ill-effects may not be apparent for some time.

The administration of intramuscular iron in the form of iron-sorbitol ("jectofer")—one injection every second day for ten doses—has as yet no known contraindication. Iron-dextran ("imferon") has received adverse publicity because of the development of malignancy in animals receiving very large doses, but no such growth has ever been reported in a human being and therefore its administration is defensible. A grave disadvantage is that it causes staining of the skin if the injection is not given in a skilful way—and the staining in some patients may last a lifetime.

Discharges

It is normal for the pregnant woman to have a discharge, yet this should not be so severe that she has to wear a pad. If the patient complains of irritation at the vulva or of the necessity to change her underwear more often than once a day or to wear a pad, or if she complains that the discharge causes chafing of her upper thighs or is other than white in colour, then further investigation is indicated.

The urine must of course always be tested for albumin and sugar routinely at each antenatal visit. If inspection of the vulva or of the vagina on passing a speculum reveals white curds, the discharge may safely be considered to be due to

monilia without any further investigations. If the discharge is yellow and frothy, trichomonas is the most likely cause. To prevent reinfection it is important to remember that trichomonas has a tendency to go forward and backwards between marital partners and that the husband too may need treatment.

It is of course ideal to investigate every discharge with the full routine of urethral, cervical, vaginal, and rectal swabs and smears and the carrying out of blood tests, but such intensive investigation is seldom practicable. Therefore, if curds are seen and monilia suspected, treatment with "penotrane" (hydrargaphen) pessaries, of which two should be inserted each night for fourteen nights, is started. Alternatively, "pruvagol" (acid fuchsine) or nystatin pessaries in the same quantity will usually give relief.

If trichomonas is found, treatment with "flagyl" (metronidazole), one tablet three times daily for a week, is usually sufficient to cure the condition. The patient will nearly always volunteer that the symptoms are relieved after two days' treatment but she should be persuaded to complete the whole course of seven days even if she has some increased nausea.

If the husband has any symptoms at all, he should receive a similar course. Rarely the couple may need to be referred to the special clinic for further investigations to exclude more serious disease.

Constipation

Probably the commonest of all the minor disorders of pregnancy is constipation. It usually worries the patient only because she feels she ought to be regular in her bowel habits. Paraffin laxatives should be avoided, because they will dissolve the fat-soluble vitamins which the patient may be assiduously taking and wash them away in the faeces. A proprietary preparation such as "senokot," of which one teaspoonful of the grains, or two tablets, can be taken each night, should be given. Foods like "all-bran," which incidentally contains a lot of iron, increase the bulk of the faeces and relieve constipation quite effectively. The patient may be told that the risks of over-purgation are far greater than the risks of constipation.

Varicose Veins

It is likely that the cause of varicose veins is the same as the cause of haemorrhoids. In each case an excess of hormone circulating in the blood, possibly progesterone, is the reason for loss of tone in the walls of the veins.

In the treatment of varicose veins the first essential is to raise the feet and knees and if possible the buttocks to a higher level than the right side of the heart to allow drainage of blood from the veins. This can be done only if the whole front of the frame of the bed is raised eight to ten inches (20–25 cm.) off the floor. As it happens, this is a comfortable position in which to sleep. Although husbands who share double beds occasionally object to it at first, they soon get used to sleeping in the head-down position.

Next comes the vexed question of elastic stockings. Nowadays very good elastic stockings are obtainable under the N.H.S. It would appear that under their conditions of service general practitioners cannot always prescribe the most effective stocking, which must cover the saphenous opening in the upper thigh (fossa ovalis). However, very light-weight nylon elastic stockings are now available. Further, a special kind of elastic knickers, reaching either half-way or almost completely down the thighs, can be prescribed, so that if the varicose veins of the leg are accompanied by varicose veins of the vulva these can be controlled by the pants. Moreover, there is no gap between the top of the stocking and the lowest part of the pants. The patient should put on these garments before getting out of bed in the morning—that is, before the veins have filled.

Haemorrhoids

These occur very frequently indeed in pregnancy, more often in multiple pregnancy and in multiparous women than in young women having their first babies. They are a nuisance and if they start to bleed are a cause of anaemia. The treatment is not easy and is rarely very effective. Most obstetricians agree that injection treatment should not be carried out during pregnancy, although the reason for being averse to this is not always clear.

The best treatment is cold bathing of the anal region with cotton-wool pledgets and replacement of the haemorrhoids if they should prolapse. Very good results have been obtained by using "alcos-anal" suppositories; one should be inserted each night on retiring to bed and the treatment should last at least four weeks. If there is irritation around the anus, an ointment made of the same preparation should be used. Initially "alcos-anal" causes some burning sensation.

Urinary Infections

In a later article in this series serious urinary infection will be discussed, but minor disturbances are almost so common in early pregnancy as to be physiological.

It is not always necessary with minor attacks to have a midstream specimen of urine examined nor to give sulphonamides. Potassium citrate gr. 30 (2 g.), with hyoscyamus, minims 5 (0.3 ml.) in each half-ounce (14 ml.), administered four to six-hourly for a week, will usually relieve those symptoms. "Urolucosil" (sulphamethizole) two tablets five times a day for five days, may be added.

If the condition continues, however, a mid-stream specimen should be sent to the laboratory and if a sulphonamide-sensitive organism is found, a long-acting sulphonamide, such as sulphamethoxypyridazine should be given. If untreated, mild urinary infection may progress to the more chronic conditions.

Backache

Most backache in pregnancy is postural. If the backache is worse in the morning, it is due to the patient's posture in bed. If it is worse in the afternoon or evening, it is due to her posture when she walks around and carries out her daily work. If due to her posture in bed something must be done to alter the bed. The simplest thing is to place a hard board six feet long and two feet wide under the patient's side of the mattress and between the mattress and the base of the bed. The patient will not often do this, but if she does she will usually obtain relief. If she will not accept the advice, the backache is usually not very severe.

If the backache comes on during the day, she should be told that bending movements, especially those required to pick up small children, should be carried out with the knees initially bent. This relieves strain on the sacro-spinalis muscles. If her abdomen sags, she should buy a good supportive corset, one that has either a rigid panel in the front or a crossed-over pattern. A relatively cheap one bought early in the pregnancy will stretch as the pregnancy continues and can be discarded at the end. There is not often need for a special maternity belt.

If the backache is associated with spasm of the sacrospinalis muscles, it may be worth while to order a maternity belt with a Goldthwaite type of metal brace built in. These can be obtained on the N.H.S. only if recommended or prescribed by a consultant. Hot-water bottles and electric pads are very effective ways of relieving backache temporarily.

Sleeplessness

Sleeplessness is very common, especially in the last few weeks of pregnancy. Small doses of hypnotic drugs therefore should be offered to patients about this time.

Hiatus Hernia

Although hiatus hernia is aggravated by pregnancy, it is not possible to investigate it during pregnancy. A note, however, should be made of the symptoms, so that if they persist when the baby is six months old investigations can be carried out.

Essential Hypertension

Blood-pressure should drop in the middle trimester of pregnancy. If a patient starts her pregnancy with an essential hypertension of say, 140/90 mm. Hg, the blood-pressure can be expected to go down to about 130/80 mm. Hg at the 24th week. If it rises again to 140/90 mm. this does not indicate toxaemia provided this initial reading had been obtained before the pregnancy started. Physicians tend on the whole to be less concerned about blood-pressure readings than obstetricians.

Disorders Revealed by the Pregnancy

We have considered the first and second groups of minor disorders and now come to those that are coincident with and revealed by the pregnancy.

Migraine

This condition occurs fairly often in pregnancy, and patients who suffer silently from it when not pregnant will often remark on it for the first time during pregnancy. Those who are used to taking ergotamine tablets should preferably not be given these tablets during pregnancy, although there is no really good evidence that they would ever cause abortion. Many women will be prepared to put up with the migraine just because they are pregnant, but there is no reason why they should not be given aspirin so long as it causes no gastric irritation.

Unsuitable Nipples

It should be common practice to instruct a patient to pull the nipples forward between the thumb and middle finger of her hand twice daily. Some flat nipples and inverted nipples can often not be pulled forward. It is as well to warn the patient with inverted nipples that she is unlikely to be able to breast feed, so that she will not become disappointed after the baby is born. The patient with flat nipples should be given nipple shields to wear under the brassière. They often help greatly to make the nipples extrude.

Conclusion

This list of minor disorders is a long one. The problem can be kept in perspective by remembering that some of these complaints are really harmless. Possibly many of them are used by patients only as a bridge for making contact with their doctors. On the other hand, conditions such as mild anaemia and the minor degrees of raised blood-pressure are the most significant items in the list. If properly treated and managed, not only will there be an improvement in the patient's health during the pregnancy but also in the years to follow.

I would like to acknowledge the assistance of Dr. I. H. J. Bourne, general practitioner of Hornchurch, in the preparation of this article.

ANY QUESTIONS?

We publish below a selection of questions and answers of general interest.

Diphtheria after Immunization

Q.—*Can a child who has been properly immunized contract diphtheria?*

A.—It is feasible that a child who has been immunized against diphtheria may contract the infection, but almost always in a mild form. The degree of response to active immunization against diphtheria is variable: much depends upon the proper spacing of the doses of the primary course and the number (and timing) of reinforcing doses. After immunization the level of diphtheria antitoxin tends to fall, and may even reach a level which is insufficient to give full protection against the disease. If infection occurs in such a person with waned immunity the antibody-producing mechanism is immediately alerted, and a rapid and considerable rise of antitoxin in the blood usually ensues. Although this is the rule, there is individual variation in responses, and in exceptional cases the clinical attack may be severe.

Cortisone in Stein-Leventhal Syndrome

Q.—*What is the role of cortisone (or its equivalent) in the diagnosis and treatment of Stein-Leventhal syndrome?*

A.—Occasionally the Stein-Leventhal syndrome may closely mimic Cushing's syndrome. In this situation the dexamethasone suppression test will usually differentiate between the two conditions. The urinary output of 17-hydroxycorticosteroids is suppressed by dexamethasone 0.5 mg. given every six hours in the Stein-Leventhal syndrome but not in Cushing's syndrome.

Cortisone has been used in the treatment of the Stein-Leventhal syndrome with some success,[1] and dexamethasone has recently been shown to increase the oestrogen output in the condition,[2] indicating, possibly, some amelioration of the underlying biochemical abnormality in which there is a defect in the biosynthesis of oestrogen by the ovary.[3]

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Relationship Between Haemoglobin and S.G. of Blood

Q.—*When using copper sulphate solution to measure the specific gravity of whole blood what specific gravities correspond to (1) 11.7 g. haemoglobin; (2) 10 g. haemoglobin?*

A.—The copper sulphate method of determining the specific gravity of plasma and whole blood with charts and a formula for calculating haemoglobin was first described by Phillips *et al.*[1 2] A nomogram derived from their second paper is published