

Venereal Disease in Relation to Pregnancy

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Lecture given at the Post-Graduate Course of the Rotherham Branch of the College of Midwives.

I would like to say before I begin how very pleased I am to come along here to-night to talk to you about venereal disease in relation to pregnancy and child-bearing.

Venereal disease assumes a more important role in war-time and already there is evidence that early syphilis is on the increase. I think that midwives are in a particularly strong position for contacting new cases in women and you can play an important part in the venereal disease services.

The female venereal patient is often difficult to locate because, unfortunately, there is a tendency in women, and, even more so in pregnant women, for the symptoms to remain hidden. This will make your task more difficult, but even more important, for it is the cases that show few symptoms which are often missed and therefore may continue spreading infection or hand down syphilis to their babies, or result in a case of ophthalmia neonatorum or vulvo vaginitis. The more I see of venereal disease, the more does this question of latency impress itself upon me, and the importance of ascertaining and treating these cases cannot be over estimated.

I propose confining my lecture to a consideration of the following conditions:—

1. Maternal and early congenital syphilis and the importance of routine ante-natal serology (W. Rs and Kahns).
2. Vaginal discharge in pregnancy including:—
 - (a) Gonorrhoea.
 - (b) Trichomonas vaginitis.
 - (c) Vaginal thrush.
3. Ophthalmia neonatorum.
4. Vulvo vaginitis.

The treatment of these conditions I shall not go into, for it is with diagnosis that you are more concerned in your work.

Maternal and Early Congenital Syphilis.—Any stage of syphilis—the primary sore, secondary rashes and their associated symptoms and signs, or the later manifestations, such as gummata may be met with during the child-bearing age, and you should therefore have some idea of all the stages of syphilis.

A syphilitic expectant mother is discovered most frequently for reasons other than that of presenting personal symptoms. Often one of her children is found to be a congenital and on investigating the family the mother is found to be suffering from syphilis. Probably, more often she is discovered by the fact that her serological tests at the ante-natal clinic have proved positive. She herself is usually unaware that she is so suffering for frequently she will have noticed nothing wrong. There is this definite tendency during the child-bearing period, accentuated during pregnancy, for syphilitic manifestations to be masked. The serological reactions during this period tend to become negative even though she may produce a stillbirth or a syphilitic infant.

It is also known that a woman can be infected with syphilis in early pregnancy and show no secondary signs until some time after delivery. There are theories too complicated to go into to explain these facts.

There is one "safety-first" rule which emerges from this: "Any woman who has once contracted syphilis before the menopause, no matter how much treatment she has been given, must during every subsequent pregnancy receive thorough treatment up to the time of her confinement if she wishes to produce a healthy child."

You have probably heard of Colles' Law, which is to the effect that a congenital syphilitic child cannot infect its mother but can infect other individuals. The reason is that the mother is already infected. To produce a congenital syphilitic child the mother *must* be infected but the father not necessarily so.

There is another so-called law—Profetas'—which intimates that a syphilitic mother may give birth to a healthy child and may nurse it without conveying syphilis to it. The case I have just quoted to you seems to support this, for two of the children appear to have escaped the syphilitic process altogether. However, many authorities maintain that if these alleged healthy children are followed up they will probably be found in the course of time to develop signs of congenital syphilis.

The last law I would mention is that of "Kassowitz" or "Diday." This will probably be the most familiar to you. The idea is that the syphilitic woman produces first an abortion, then a macerated foetus, then a stillborn child, then a premature living child, then a full term living child, and ultimately apparently healthy offspring with successive pregnancies.

Occasionally this law does hold good, but more often one sees miscarriages alternating with stillbirths and with living children or even all apparently healthy children, except one or two who develop signs some years after birth.

Based on Diday's Law of Decrease has arisen the conception that instead of doing a routine W.R. on all ante-natal women, who have given such a history as that outlined by the "Law" should be tested serologically. I hope I have demonstrated to you that this idea is erroneous. Routine serological testing of all ante-natal women may mean 98 negatives for two positives, but to prevent two stillbirths or birth of two congenital syphilitic children is well worth time and trouble taken. Further, once the woman has been discovered, other cases in the family will probably be forthcoming.

Surely it is folly for you to spend so much time and trouble with your ante-natal work—testing urine, taking blood pressures and so on—if a child is going to develop blindness or deafness some years afterwards.

When should treatment be given to syphilitic ante-natal women? The answer is, as early in pregnancy as possible, and, therefore, it is important that the routine serology should be carried out at the first ante-natal attendance. It is thought that the spirochaete does not pass over from the mother to the foetus until the fifth month and, therefore, it should be the aim to ascertain cases before this time.

Do not forget that you can sometimes get information from the placenta—a syphilitic placenta is larger, softer, paler and more friable than normal—and if you have been too late in getting your sample of blood during the ante-natal period a specimen of the cord blood should be examined.

Now as to congenital syphilis itself. All stages except the primary sore may be seen. Signs usually come on after the third week and, therefore, you may not be in a position to see them—the health visitor will see them, but you should know of them.

Snuffles in a true case is blood-stained or purulent and is a rare symptom. The rashes may be of various kinds, but an indurated erythematous rash on the chin, around the mouth, on the palms and soles and perineum is often seen. The perineal rash should not be confused with napkin rashes. The syphilitic pemphigus rash attacks the palms and soles. The child is often irritable, cries a good deal with an aphonic cry and loses weight. There may be condyloma around the anus and the spleen may be enlarged. A pseudo-paralysis of the arm or leg is not uncommon and is due to syphilitic epiphysitis.

It is possible but rare for a child to acquire syphilis at birth or shortly after, but in these cases a primary sore will come out first.

Cases of third generation syphilis do occur and I have two families which I cannot prove but strongly suspect are third generation cases.

Vaginal Discharge in Pregnancy.

There are, of course, many causes of vaginal discharge in pregnancy, but I intend considering gonorrhoea, trichomonas vaginitis and vaginal thrush only.

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Gonorrhoea

A woman who is infected with G.C. at the commencement of pregnancy or during its course usually shows rather severe symptoms due to the increased vascularity of the pelvic organs at this period. There may be intense dysuria and frequency of micturition and profuse vaginal discharge. Untreated it may rapidly subside and persist in a chronic form through pregnancy showing few signs. In the puerperium it may spread to the tubes and ovaries. Gonococcal puerperal sepsis cases are usually delayed till the end of the second week and the course mild. Often the woman is first seen when the acute attack has subsided or the acute stage may have been short and not severe and she may not complain of the slight amount of vaginal discharge. So many women regard vaginal discharge as part of their normal lot in life, but it is a good rule that any woman who has sufficient discharge to stain her under linen or necessitating the constant wearing of a diaper should be thoroughly examined clinically and bacteriologically. I frequently see women who have a minimum of signs (so slight that the woman regards herself as normal) and yet when smears from the cervix and urethra are examined they show abundant gonococci. Such cases which often go undiscovered (and there must be many thousands to-day) may develop complications months, or even years, afterwards, which are difficult to treat, cause great suffering and disability and necessitate mutilating surgical procedures. So remember this rule and put it into practice whenever you possibly can. It is also a good plan when you are taking your history of previous pregnancies to enquire if any of the previous infants needed treatment for the eyes. If they did and the mother received no treatment, then you should see that she is investigated, and if necessary treated, before her next confinement.

Trichomonas vaginitis is a fairly common cause of vaginal discharge in pregnancy. Often gonorrhoea and trichomonas co-exist in the same patient.

It is caused by a flagellated parasite, "*Trichomonas vaginalis*," which needs an environment with a reaction just on the acid side of neutral for it to cause infection.

The common symptoms are a profuse vaginal discharge, often evil smelling and yellowish-white or greyish-brown in colour. There is vulval irritation and soreness and sometimes pain on micturition and intercourse. Insertion of a speculum is painful and the vaginal mucous membrane, particularly in the fornices, is reddened and may show small granulations. The cervix often gives a "strawberry" appearance.

Diagnosis is confirmed by microscopic examination and such cases respond well to treatment with S. V. C. tablets or with Pieragol treatment.

Vaginal Thrush

Pregnant women by no means infrequently suffer from vaginal thrush and I will give you the history of a recent case I saw. A married woman of 18 was pregnant 4-12 and referred to me as a suspected case of G.C. She had a good deal of vulval soreness and dysuria. The vulva was oedematous, inflamed and bathed in pus. Insertion of a vaginal speculum was very painful and the cervix and vaginal walls were covered with a white, soft, cheesy material. On scraping this away small bleeding points were left. Smears showed the presence of hyphae and spores.

She was treated by gentian violet applications and rapidly cleared up, but relapsed each time treatment was suspended. As far as I know the condition disappeared after parturition. (No recurrence after one year.)

Ophthalmia Neonatorum

In 1936 there were 4,585 cases notified in England and Wales.

By ophthalmia neonatorum we mean a purulent discharge from the eyes of an infant commencing within 21 days of birth, and it is a notifiable disease. It is estimated that about 60 per cent. are due to the gonococcus—the eyes being infected during the passage of the head through the birth canal or after birth by contamination with towels, sponges or hands.

The condition was and still may be a potent source of blindness. The improvement in asepsis and Crédes prophylactic instillation of silver nitrate drops into the eyes at birth have contributed largely to the diminution in the number of cases.

However, Cr  des prophylaxis has probably concealed many cases where all is not well with the mother. But for the drops the child may have developed ophthalmia and the mother investigated.

The prevention of ophthalmia neonatorum should not be confined to these two measures, but should extend back into pregnancy with a thorough investigation and treatment of vaginal discharge.

The majority of ophthalmia neonatorum cases that I see are from mothers who had suffered from untreated vaginal discharge in pregnancy. I have found it is the exception rather than the rule for a swab of the eyes to be examined. Swabs should always be taken and examined for gonococci. The mother should also be examined in every case and in some cases, where the history justifies it, the father also.

In severe cases of ophthalmia neonatorum both mother and child should be treated in hospital.

Vulvo Vaginitis

As midwives you will rarely see cases of vulvo vaginitis in infants. It is not common in the first two weeks of life, but you should bear in mind its possibility, since infection of the infant's vulva is possible by direct contamination during birth.

Summary

Summing up, I would like to lay particular stress on the following points :—

1. Venereal diseases and particularly syphilis may remain latent in pregnancy.
2. A routine W.R. and Kahn should be done on every ante-natal woman as early in pregnancy as possible.
3. Treatment of pregnant syphilitics should be given as soon as possible in pregnancy and continued throughout.
4. A woman who has once had syphilis even though apparently cured should always have treatment during every subsequent pregnancy.
5. Any muco-purulent or purulent vaginal discharge in pregnancy should be thoroughly investigated clinically and bacteriologically.
6. Swabs from the eyes of ophthalmia neonatorum cases should always be examined bacteriologically and an attempt made to investigate the mother.

If you remember these points and endeavour to follow them out you will help materially in reducing much eminently preventable disease and suffering.

—By Courtesy of "*The Midwives' Chronicle and Nursing Notes.*"

Student Nurses' Section

This month we publish a report sent by The Unit Secretary of the K. E. M. Hospital, Bombay. According to the diaries and annual reports received, some units have most interesting meetings, and happy outings—may we ask you to share this news with other hospitals?

Reports of activities will be gratefully received by the Hon. Sec. of the S. N. A.
Report of activities of the K. E. M. Hospital, Bombay.—The 18th and 20th January were red letter days in our annals, for we had our moonlight picnics to Juhu Beach. The whole nursing staff was divided into two batches, each batch going on their respective dates. I was one of the lucky ones to go on the 18th. At 5 p. m. sharp we left the nurses' home in two buses. Never were public conveyances packed with a more mirthful and jolly gang of youngsters. Certainly we did not forget the huge hampers filled with a lovely dinner and various other tit-bits to feed fifty odd tired and hungry girls. The moment the buses got into motion the calm of the evening atmosphere was broken by loud cheers and hurrahs bursting from several joyful throats. As the buses whizzed along the streets the dazed public would stand back and stare with gaping mouths, supposing us to be a menagerie imported perhaps from the South Pole! Half an hour's drive brought us to the beach. We were permitted to enjoy ourselves as we liked until dinner time which was at 7 p. m. Several of us took to the water at once, either wading or swimming. Some others strolled along the sands picking up shells and building sand castles, and the rest were happy playing games, like forfeits etc. At 7 p. m. sharp we were ready for dinner, tired and