he took altogether only sixteen 5-mg. tablets of stilboestrol—and none since. He continued to attend one or two social clubs from December 9, 1948, with one or two short spells of relapse.

Since February 17, 1949, his inability to mix, especially with the opposite sex, his feelings of tension in the company of girls, and his compulsion to rape them have completely disappeared. He mixes freely in the club with both sexes and takes an active part in the club activities. He now enters the house in the normal way.

Psychopathology

The patient was a placid self-contained (in the words of his mother, a "marvellous") baby who provided no difficulty. He was extremely intelligent—"as advanced at 18 months as his cousin at 5 years." He was good-looking and admired by everybody, but at the same time so sensitive that he was unable to stand criticism.

He was twice severely reprimanded by his mother before he was 5 years old—in both cases in connexion with girls. He was always sensitive to his parents' low economic and social standard. His strong desire to over-compensate was best expressed in his own words: "I wanted to do something spectacular to impress the women, I suppose." His hatred towards one of his male teachers is pathological, mainly because he was caned in front of girls between the ages of 7 and 11 years. "It was an unbearable blow to my pride to be caned before my adored ones—one in particular being, as I then thought, perfectly lovely, and she must have witnessed my shame."

Although he got his scholarship, topping 200 boys and girls, he soon afterwards dropped to 28th in a class of 31 boys; yet at that time he was top of his class in geography, possibly because the mistress who taught this subject was a pretty girl of 18.

Discussion

Dunn, using oral stilboestrol, has caused the disappearance of the hypersexual state and a total lack of sexual impulse in a male sexual criminal aged 27, and in a precociously developed boy aged 12: 375 and 565 mg. of stilboestrol, respectively (in the main 5 mg. daily), produced moderate and advanced degenerative changes in the seminiferous tubules (resulting in a temporary sterility) in the human testicle. Discontinuance of stilboestrol therapy for 9 to 16 weeks resulted in regenerative reaction of the degenerated seminiferous tubules and reappearance of sexual impulses at a subnormal level. In view of the serious social problem involved in these cases, stilboestrol therapy was resumed as a precautionary measure when the patients showed interest in sexual matters and the associated restlessness and activation of the hypersexual state. In these experiments the abnormal sex impulse, the interest exhibited in sex matters, or the associated restlessness and hypersexual state reappeared a short time after the administration of stilboestrol was discontinued. Stilboestrol therapy may be maintained until from 300 to 400 mg. has been administered.

In our case the sexual desire and interest reappeared too, but the attached pathological mental symptom—the compulsion to rape women—did not reappear, and his complete inability to mix with members of the other sex disappeared entirely.

Summary and Conclusion

A case of a 33-year-old schizoid is described. He had locked himself away and not worked for 15 years.

It was found that his reason was that he did not want to give in to a strong compulsion to rape women and children.

After the failure of some other forms of treatment stilboestrol was given, with the result that this compulsion disappeared.

Resocialization through therapeutic social clubs was then possible.

This patient has regained his ability to mix with both sexes after 15 years of seclusion.

Nothing can be concluded from the treatment of one case. However, it is reported to encourage others to experiment with the use of stilboestrol in the out-patient treatment of potential and actual sexual offenders as an adjunct to various methods of psychotherapy and re-socialization.

Our thanks are due to Dr. R. Ström-Olsen, Physician Superintendent of Runwell Hospital, for his help and co-operation, and to Miss M. C. Fanta, Psychiatric Social Worker, for the case report.

EARLY RISING FOR PUERPERAL WOMEN

BY

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From time immemorial it has been considered desirable among civilized races for recently delivered women to remain in bed for periods varying from 10 to 28 days. This old regime certainly has the merit of enforcing rest in the puerperium, and has strong advocates in Jardine (1910), Berry Hart (1912), and Peel (1947). An effort to strike the balance between complete rest in bed and early rising has been made by Balfour Marshall (1912) and Shaw (1947), who consider that exercises and movement in bed should be encouraged.

The advantages, both physical and psychological, of early rising are, however, such that this method is displacing the older methods of treating the puerperal woman. The present position is well reviewed by Pocock and Kark (1947) and in a leading article in the *British Medical Journal* (1948). In this country de Soldenhoff (1948) reported favourably upon a series of women allowed to rise from the third day of the puerperium. He failed to follow up his cases in the post-natal period, however, and it is mainly to fill in this gap in our knowledge that the present study, based on one year's experience, is presented.

Material

The women studied were those who normally receive in-patient treatment at University College Hospital. Owing to the shortage of accommodation selection was essential, preference being given to women with a history of difficult labour or caesarean section, women with gross obstetric or medical abnormality, normal primigravidae, those with parity greater than four, and complicated labour cases admitted as emergencies.

Within these groups the women comprised a representative cross-section of the child-bearing population. Ages varied from 15 to 44 years and parity from 0 to 17. Many nationalities and races were represented. The majority of the women came from the Registrar-General's categories II, III, and IV, and had attended the antenatal clinic at this hospital, although a few had attended L.C.C. clinics outside.

After delivery the women were unselectively distributed between two wards, C1 and C2. Complicated cases (some of which are discussed briefly), in addition to the "normal" series in this paper, were nursed on Ward E.

Ward C1.—The women in this ward were permitted early rising. The regime was as follows:

1st day: The mother sits up and swings her legs over the edge of the bed for about five minutes, morning and evening.

2nd day: As above, but gets out of bed and stands for about three minutes.

3rd day: She walks round the bed once or twice. Sits in a chair to feed the infant.

4th day: As 3rd day, but she walks to toilet whenever necessary.

5th day: As 4th day, but she is up for longer periods.

8th day: Non-absorbable sutures, if any, removed.

10th day: Discharged.

Ward C2 (Control).—In this ward, the mirror image of C1 and nursed by the same staff, the women were kept in bed until the eighth day and then allowed up for toilet, feeding the infant, and the evening meal.

The grouping of the mothers in these wards was as follows:

	Ward C1	Ward C2	Total
Primiparae	197	171	368
Multiparae	104	116	220
Caesarean sections	18	—	18
Totals	319	287	606

Ward E contained 222 cases which were unsuitable for C1 or C2. They were "potentially infected" cases that had undergone forceps delivery or had severe perineal tears. All who were well enough were permitted early rising of the C1 regime, or this was modified to suit the individual patient. Medically unfit patients, such as those with heart disease, diabetes, toxæmia of pregnancy, anaemia, etc., were treated separately in another ward and are not considered in this paper. Five of these women were delivered by caesarean section.

Observations Recorded

The following points were specially noted in the immediate post-natal period: (1) general infection, (2) genital infection, (3) urinary infection, (4) subinvolution, (5) incidence of thrombosis, (6) cracked nipple, (7) non-suppurative mastitis, (8) breast-feeding (established, complemented, or failed), and (9) general condition on discharge.

At the post-natal examination six weeks after delivery the following observations were recorded in each case: (1) anaemia, (2) breast-feeding (maintained, complemented, or failed), (3) abdominal pain, (4) backache, (5) bladder symptoms (stress incontinence), (6) raised blood pressure, (7) vaginal discharge, (8) lax abdominal muscles, (9) cystocele, (10) deficient perineum, (11) laceration of cervix, (12) cautery of cervix for erosion, (13) position of the uterus (anteverted or retroverted), and (14) tenderness of the appendages.

Results

The numbers of cases under each of the above points of observation were recorded for the "early rising" and "control" groups, and these were statistically analysed to demonstrate any significant difference between them.

In the period immediately following delivery, while the women remained in hospital, no statistical difference between the groups was recorded under any of the heads noted. At the remote post-natal examination, however, it was found that among primiparae there were significant differences under "lax abdominal muscles," "laceration of the cervix," "pain," and "vaginal discharge," while among multiparae they occurred under "lax abdominal muscles" and "laceration of the cervix." These differences seemed to be against early rising, but on further examination it was found that in the C1 group of primigravidae 55 cases of lacerated cervix were recorded—almost four times the incidence in the C2 group. This

laceration is obviously the result of labour and cannot be attributed to early rising, and explains the raised incidence of pain and vaginal discharge in this group. Under none of the other heads was a significant difference recorded. The majority of the multiparous women were nursed in C1 ward, and they raised the incidence of "lax" muscles in this subgroup.

Though the figures were not significant, there was a slightly higher incidence of mastitis in the "control" group, but these women had a somewhat lower incidence of urinary infection.

In the C wards, one early and two late risers suffered from a superficial thrombophlebitis. All these women had experienced trouble with varicose veins during pregnancy. No case of deep femoral thrombosis occurred in the C wards but there was one in E ward.

In the present series one mother in C1 died within 36 hours of delivery following sudden collapse. Necropsy revealed the presence of uterine sepsis and bilateral tuberculous disease of the suprarenal bodies.

In E ward, as might be expected from the nature of the cases admitted, the incidence of puerperal morbidity and infection was higher. In the remote post-natal period, however, this group was not significantly different from those in C wards.

Discussion

This study presents the observations upon 828 women in the puerperium, of whom 23 underwent caesarean section. Of the remaining 805 who underwent vaginal delivery, 588 "clean" cases were admitted to the C wards, while 217 "potentially infected" cases were nursed in E ward. Only seven mothers in E ward were unfit for early rising.

The observations show that early rising seems to have no deleterious effects upon the women, those numerous differences which appear significant being partly explained by the accidental distribution to the wards after delivery. No difference was found between the remote complications, such as prolapse and retroversion. It is fully realized that observation over many years would be necessary to study the effects of early rising on prolapse. However, so many factors influence prolapse that correct control would be almost impossible. Early rising entails no risk to the recently delivered woman.

In favour of early rising, moreover, is the reaction of the woman herself. She feels fitter, has less trouble with defaecation and urination when the bedpan is not necessary, and undergoes less puerperal depression. The nursing staff also feels that the regime is more satisfactory and tends towards the psychological well-being of the puerperal mother.

Finally, it is stressed that early rising is not suitable in domiciliary practice, where once the woman is ambulant the urge to meet her domestic obligations is irresistible. Nor is it to be used as a means of increasing hospital turnover by discharging the women earlier than hitherto. For a multiplicity of reasons it is still considered essential to keep the recently delivered woman in hospital for a minimum of ten days, whereby she derives the benefit of rest combined with the advantages of early rising.

I am indebted to Professor W. C. W. Nixon, Director of the Obstetric Unit, University College Hospital, for granting the facilities to carry out the investigation and for much helpful advice in preparing this paper. My thanks are due to Miss E. M. C. Edwards, Sister of C wards, for her willing help and interest, and to Mrs. M. Merrington and Mr. C. E. Wrigley, of the Department of Statistics, University College, London, for the statistical work and advice.

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TWO SUCCESSFUL POST-MORTEM CAESAREAN SECTIONS FOLLOWING SPINAL ANALGESIA

BY

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The following two cases of maternal death after spinal analgesia present three points of interest. Two live babies were delivered by classical caesarean section performed some four minutes after maternal death, during which time every possible effort was made to resuscitate the mothers. Both patients were exhausted, and suffered from malnutrition and some degree of anaemia. In each case our intention was to perform caesarean section in order to terminate imminent obstructed labour. In both cases death followed immediately on the administration of 2 ml. of amylocaine hydrochloride ("stovaine") and before the operation had begun.

Case 1

A primipara, aged 28, who had not attended the antenatal clinic, was admitted on July 1, 1949, at term. She had been in labour for 20 hours, with the membranes ruptured for 15½ hours, and was now having strong frequent contractions.

Her general condition seemed good, but there was evidence of malnutrition and anaemia. The temperature was 98.4° F. (36.9° C.), the pulse 100, the respirations 20, and the blood pressure 100/64 mm. Hg. Abdominal examination revealed that the position of the foetus was right occipito-anterior, with the head overlapping the symphysis pubis. The foetal heart rate was 144. On vaginal examination the cervix was found to be two fingerbreadths, and the pelvis generally contracted with a promontory projecting acutely forward.

In view of the findings of marked disproportion, we decided to perform a lower-segment caesarean section. Atropine, 1/100 gr. (0.65 mg.), was given as premedication. One hour later, ephedrine, ¼ gr. (50 mg.) intramuscularly, was followed by 2 ml. of amylocaine intrathecally. About ten seconds later she began to gasp violently. Breathing ceased about 45 seconds after administering the analgesic, but the pulse continued for a few seconds longer. During this time ephedrine, ¼ gr., was repeated, followed by 8 min. (0.5 ml.) of adrenaline hydrochloride (1 in 1,000), an intracardiac injection of nikethamide, 1 ml., and also anal stimulation. Despite these measures and artificial respiration there was no response. The abdomen was rapidly opened and cardiac massage from below the diaphragm attempted without effect. A classical caesarean section was performed and a live baby, weighing 7 lb. (3.2 kg.), was delivered some four minutes after the mother's death.

Case 2

A primipara, aged 22, who had not attended the antenatal clinic was admitted on September 27, 1949, at term, having been

in labour for 16 hours, and with the membranes ruptured for six hours.

On examination her general condition suggested nutritional deficiency. The temperature was 99° F. (37.2° C.), the pulse 120, the respirations 24, and the blood pressure 102/64 mm. Hg. Abdominal examination revealed that the bladder was distended, the position of the foetus was left occipito-anterior, the head engaged, and the foetal heart rate 148.

Per rectum, the head was felt low mid-cavity with a marked caput, and the cervix, which was three fingerbreadths dilated, was very oedematous and tight. Per vaginam, the rectal findings were confirmed, and it was found that the pelvic outlet was markedly contracted, the subpubic angle being about 75 degrees, and the outlet transverse 3 in. (7.6 cm.) The head could not be displaced for catheterization. It was decided to perform a lower-segment caesarean section.

After the usual precautions, amylocaine, 2 ml., was given intrathecally, and the patient collapsed immediately. The same resuscitation procedure was carried out as for Case 1, with the exception of cardiac massage, but there was no response.

A classical caesarean section was immediately performed; an asphyxiated male baby, weighing 6 lb. (2.7 kg.), was delivered, the baby responding to treatment.

Discussion

It is not our purpose to discuss the advantages and disadvantages of spinal analgesia for caesarean section. The deliberations at the meeting of the Section of Obstetrics and Gynaecology of the Royal Society of Medicine in March, 1947, revealed how divided were the views of leading authorities. Bourne and Williams (1948) are eloquent in their summing-up of the present situation, and conclude: "There is, we fear, in this country, a considerable number of young healthy pregnant women who stand condemned to death by spinal anaesthesia for caesarean section."

When we took up our present appointments a year ago we were of open mind, because one of us (A. H. C. W.) had performed 179 caesarean sections at the Postgraduate Medical School of London without mortality, using spinal analgesia in some ten cases, but we have been obliged by circumstance to use it here. We personally have used the method for 168 major gynaecological cases here without any death attributable to it.

These two recorded catastrophes were among our first 12 caesarean sections under spinal analgesia. We are tempted, therefore, to assume that the risks are peculiar to the pregnant woman, and especially to the West African parturient, whose average blood pressure, like that of her Indian counterpart (Napier, 1946) is lower, with the result that the margin of safety is less should a fall in blood pressure occur as a result of the spinal analgesic. Moreover, West Africans here are often admitted late in labour in an exhausted condition and suffering from malnutrition and anaemia, which it may be impossible to countefact in a short space of time.

Since these two catastrophes we have been able to avoid spinal analgesia, and we have performed a further 17 caesarean sections without mortality, using open ether.

Summary

Descriptions are given of two cases of maternal death after spinal analgesia, in which live babies were delivered by post-mortem caesarean section. Reasons are suggested for the deaths of these two women, who were both West African natives. Spinal analgesia was afterwards avoided, and no further trouble was encountered in 17 cases of caesarean section.

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