performed on the left side in the first place. Is it necessary to complete it on the right side? It would be difficult to give any categorical answer, but it is more than likely that in the majority of cases the operation on the left side would be sufficient. None of the surgical methods suggested can yet be considered the ideal; it is certain that cervico-thoracic sympathectomy must be absolutely abandoned, whilst each of the other methods has as yet done no more than establish a right to be considered in therapeutics. In the present state of our knowledge regarding the innervation of the heart and aorta in man it is only possible to outline a hypothesis, but research is proceeding. It is unnecessary to add that the hypothesis can be modified or even abandoned in the face of fresh facts if they show that it is faulty, but at the present moment the line of reasoning set out above is the only one that seems legitimate.

PROLONGED REST IN THE HORIZONTAL POSITION A FERTILE CAUSE OF PUERPERAL SEPSIS.

BY

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IN the BRITISH MEDICAL JOURNAL of August 16th I read a leading article on ante-natal care in private practice, in which the following statement occurs: "Indeed, it is only too true that with the exception of the advances rendered possible by the advent of anaesthesia and of Listerism (chiefly in Caesarean section) there has been little progress in obstetrics during the last fifty years." This is a very strong indictment with regard to an important branch of medical science. But with regard to the preventive treatment of puerperal sepsis I am afraid it is only the absolute truth. No doubt antiseptics have proved to be excellent preventives, the records of the New York Maternity Hospital showing that since their introduction in that institution the mortality from puerperal sepsis has been reduced to nearly one-fifth of what it had been previously. But much still remains to be done to save innumerable valuable lives. Two things struck me forcibly when I was one of the visiting physicians to the Cork Maternity. One was the thorough contempt the patients in the lanes exhibited for the teachings of medical science with regard to the amount of rest that should be taken after a confinement. The other important fact was that puerperal sepsis was almost unknown amongst these women, though they lived in the midst of squalid poverty and in surroundings which were the reverse of sanitary. Since then, many times I have asked myself whether it may not have been a case of cause and effect. Did the early sitting up indulged in by these patients and their rising from bed at an early date to do their work all tend to prevent lodgement of the lochia in the uterus and vagina, and thus render them less susceptible to sepsis? When I was a student the teaching would almost imply absolute immobility in bed for the puerperal woman. Now things are more liberal, as it is considered quite orthodox for the patient to sit up when micturating. But I see one modern author would not allow his patients to leave their beds till between the tenth and fourteenth days, whilst others would keep them lying down till the eighteenth day. Whether this lengthened rest is necessary, or on the other hand injurious, is a problem still awaiting solution.

As I was anxious to know whether the poor in the slums of the city were still adopting the same methods as they did when I was a visiting physician to the Maternity, I questioned the present matron, who is a trained obstetric nurse, and as such had a good practice of her own prior to obtaining her present appointment nearly ten years ago. I elicited from her some very interesting and important information. She tells me that the average time extern patients remain in bed is four or five days, and she gave me the history of sixteen of these patients who were still under the care of the nurses when she was speaking to me. Five of them remained in bed till the fifth day only, but the other eleven considered that time too long and they

got up the third day. On the third day when the nurses called to attend the eleven they found one of them washing a tub of clothes, another was scrubbing the floor, and another was gone to town, probably to bring home the marketing. And yet amongst the extern patients there was only one case of sepsis during the nearly ten years the matron has been connected with the Maternity. On the other hand, within the same period amongst the intern patients, who are much fewer in number, there were three cases of puerperal sepsis. All three were half sitting up during micturition and defaecation. One of the three sat up fully the third and every day afterwards, and she recovered. The other two did not sit up fully any day, and both died. Had the prone position nothing to say to the development and continuation of the sepsis in these cases? I will have more to say on the subject presently, but here I may mention that some years ago in a work on midwifery I read that the author had a case of puerperal sepsis, and the patient, contrary to his instructions, got out to the night-chair, and within a very short time there was quite a considerable drop in the temperature, probably due to the drainage of the uterus.

Before considering whether sitting up in bed at stated intervals may be an advantage or disadvantage for the puerperal patient, and before discussing whether prolonged rest may or may not be beneficial, we had better first study Nature's methods of defending the organism against bacterial invasion. First of all we have the vaginal bacillus, an efficient sentinel ready to attack any pathogenic bacteria that may have gained entrance through the ostium vaginae. But it is during labour that the most energetic forces are brought into play. At the end of the first stage the rush of the liquor amnii tends to flush out all bacteria that may be present. During the second stage the downward passage of the child's body tends to firmly brush them out. The expulsion of the secundines produces a similar result, and then the after-bleeding helps to complete the work.

Here, now, are some of the arguments that have been used against getting the patient at stated times to sit up in bed and against her rising early. We are told that she might get pulmonary embolism. But it is now asserted that pulmonary embolism, except in the presence of some complication such as sepsis, cannot occur later than six or eight hours after labour. Be that so or not, much would depend on the suddenness with which the alteration in position had been made. Again, though undoubtedly a formidable complaint, at least here in Cork it is of very unusual occurrence. I can recollect seeing only two cases. One died within about ten minutes; as a matter of fact I did not actually see her in the attack at all. The other was alcoholically inclined, and when I was resuscitating the child she suddenly sat up in bed and said we were paying all attention to the child and none to her. The attack came on at once, but she recovered, and I remember part of the treatment was the application of leeches to the precordium.

Another argument which has been used is that owing to the supporting ligaments of the uterus being soft and their lengthening remaining, and also owing to the uterus being heavy prior to involution taking place, prolapse would be likely to occur. I must own that even after starting this paper that seemed a puzzle for me, but I reflected that if things were as represented any number of the denizens of the lanes of the city should be victims of prolapsus uteri; and I asked myself, are the poorer women attending the gynaecological department of the Maternity more frequently suffering from this complication than the well-to-do patients coming to my study? I must say in this regard that I am inclined to think there is very little difference between these two classes of women. If the puerperal woman were left to her own devices surely she would wholly or partially sit up when micturating or giving the breast to the child, and I asked myself, Could Dame Nature, so careful in other respects, be so negligent of the puerperal patient as constantly to subject her to the risk of becoming a chronic invalid solely because she had fulfilled the high function of propagating the species? Further thinking led me to a solution of the problem. Here it is: the first day of the puerperium the walls of the uterus are nearly two

inches thick, and the fundus is five inches above the symphysis pubis. Consequently at this time we are dealing with a very bulky organ which is resting on the false pelvis and on the brim of the true pelvis. Even on the ninth day, the day on which many ladies get up, it is so comparatively large that the fundus is still an inch above the symphysis, and even when the uterus becomes a pelvic organ it must for some time be getting surroundings support. Clearly, then, during a very great part of the puerperal period there is no need for the suspensory ligaments to exercise their normal functions, and they can well afford to wait till they will have contracted sufficiently to enable them to do their work efficiently.

So after all Dame Nature is not the blind goddess some obstetricians would represent her to be, and I am afraid that we must dismiss as a figment of the imagination the oft-repeated statement that much sitting up in bed or the early rising of the puerperal woman gravely endangers her suffering from uterine prolapse.

In this connexion I may point out that it is known that certain uterine displacements are prolific causes of abortions, and if early sitting up in bed and early rising during the puerperium readily lend themselves to the production of these displacements, then we ought to have any number of abortions amongst the extern patients of the Cork Maternity. But what are the facts? Statistics indicate that something like 10 to 20 per cent. of all pregnancies terminate in abortions, and yet the records of the Maternity show that amongst the extern cases attended the number of abortions was a little less than 3 per cent. of the pregnancies. I recently questioned a gentleman who had been a prominent Government official in the Transvaal, as to the habits of Kafir women with regard to their confinements, and he told me that after the confinement they would be out working hard that very day in the fields; and he added that Kafir women are a healthy race. In answer to further inquiries, he said he never heard of a Kafir woman having puerperal fever, but he had heard of Europeans suffering from the disease.

I have now mentioned some facts that would tend to indicate that women who rise, perhaps, in some instances, too soon are less liable to be attacked by sepsis than women who remain lying down for a considerable time, and I think we might with advantage investigate this subject further. Judging from the energetic measures taken by Nature during and soon after labour to get rid of any noxious bacteria that may have found entrance into the genital tract, we may assume that an important function of the lochia is to wash out any debris that may have remained in the uterus after labour is ended, and we know that a piece of the membranes might be left behind unnoticed and, even though small, large enough to form pabulum for a whole colony of bacteria and a suitable nidus from which they could lay siege to the adjoining tissues. It would be almost an insult to intelligence to ask whether the bit of membrane would be more readily removed by the lochia when the patient is sitting up or in the prone position. Another function of the lochia is to flood out any pathogenic bacteria which may have gained entrance to the vagina or uterus, and the same remarks with regard to position apply to this. But that is not all. The dorsal decubitus causes the lochia to stagnate in pools in both the uterus and vagina, thus forming veritable forcing beds for the breeding of noxious bacteria. Furthermore, the lochia retained in the uterus, acting as a foreign body, interferes with adequate involution, leaving the cavity larger with freer entrance for the bacteria; owing to this subinvolution the uterine vessels and lymphatics are not adequately compressed by the muscular fibres, and the bacteria or their toxins can all the more readily get into the general circulation. Once puerperal sepsis develops this state of affairs tends to accentuate matters. For some years past I have been instructing my patients to sit up at stated intervals in bed, with, as I believe, good practical results.

Out of the mouths of babes comes wisdom, and poor women residing in the slums of Cork, who through force of circumstances felt compelled to ignore medical advice, have taught me what I consider a very valuable lesson.

British Medical Association.

PROCEEDINGS OF SECTIONS AT THE ANNUAL MEETING, BRADFORD, 1924.

SECTION OF OBSTETRICS AND GYNAECOLOGY.

JOHN S. FAIRBAIRN, M.B., F.R.C.P., F.R.C.S., President.

DISCUSSION ON DYSMENORRHOEA IN YOUNG WOMEN: ITS INCIDENCE, PREVENTION, AND TREATMENT.

OPENING PAPERS.

I.—ALICE E. SANDERSON CLOW, B.Sc., M.D., B.S.,
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"DYSMENORRHOEA" is a word to which so many definitions have been given that it is necessary to state in what sense one is using the term. This entails an understanding as to what we mean by "normal menstruation." Experience has taught me that menstruation is a function which, when normal, has no symptoms. If there were not external evidence of it a large proportion of women would not know when it was taking place. This is the normal state of affairs. Suffering of any kind associated with the menstrual period is abnormal, and is included in the meaning of the word "dysmenorrhoea" as used in this paper.

INCIDENCE.

In support of the above statement with regard to normal menstruation I have obtained, during the last eleven years, the following figures, as the result of questioning over 2,000 healthy girls whose ages range approximately from 12 to 22 years. The information was elicited at the first interview after the onset of the catamenia. Of these girls, 1,830 were at a secondary school (in which the majority of the pupils were boarders), and were seen in the course of the annual medical inspection; the remaining 220 were students at a training college for teachers, at which I have been one of the medical officers for the last five years.

Having decided from the first that there can be only one line of demarcation between normal menstruation and dysmenorrhoea, I divided the cases into two main groups. In the first group (normal) I put those who stated that they had no pain or discomfort whatever during the period, or as they usually expressed it, "felt just ordinary"; also those who had, on very rare occasions, experienced some discomfort. In the second group (dysmenorrhoea) I placed all those who owned to any pain, however slight, or any feeling of malaise, such as headache or nausea, associated as a general rule with the menstrual period. This group I further subdivided under three headings according as the symptoms were "slight," "subacute," or "disabling." The result was as follows:

Number of girls questioned, 2,050.

Group I. Normal	...	...	...	78%
Group II. Dysmenorrhoea—				
Slight	...	...	...	17%
Subacute	...	...	...	2%
Disabling	...	...	...	3%
				22%

Of the type of dysmenorrhoea known as "spasmodic" I have only recorded five cases. It is remarkable how rare it is for any pain or discomfort to be experienced during the first two or three menstrual periods. Only three girls stated that this was the case.

The percentage of cases of dysmenorrhoea from my own investigations is much lower than that obtained from schoolgirls by the two observers quoted by Dr. Blair Bell¹ at the Congress of Obstetrics and Gynaecology last year. These figures (53 and 42 per cent.) were obtained from 268 and 500 girls by Dr. Marie Jacobi and Dr. Catherine Chisholm respectively.

Now the figure I obtained with the first 734 girls interviewed, as recorded below, was 46.7 per cent., which is about midway between the two percentages quoted above.