INCIDENCE OF THE ATALANTA SYMPTOMS

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Introduction

In an earlier paper in this journal (O'Neill, 1950) I drew attention to a concomitance which appeared to exist in a group of gynaecological symptoms. This concomitance first presented itself in the case records of women whose children had been referred to me with various recurrent disorders, such as headache or abdominal pain. The women themselves were not patients, in the first instance, although a few of them were taken on for treatment, yet the incidence of certain gynaecological symptoms seemed to be higher among them than one would expect among normal people. The symptoms were: Frigidity, dyspareunia, dysmenorrhoea, irregular menstruation, menorrhagia, amenorrhoea, abortion or miscarriage, vomiting in pregnancy, difficult labour, depression or illness in the puerperium, and failure of lactation. Many of the women examined showed four or more of these symptoms. It was clear that the association between the symptoms, if such an association there was, could not be explained in physiological terms, and I put forward the hypothesis that one major determinant in the aetiology was an unconscious repudiation of femininity. At the suggestion of Dr. Vertue, the syndrome was named after Atalanta, the Arcadian who competed so successfully with men.

The hypothesis was a tentative one, and its statement immediately raised two important questions: (1) Is the incidence of this group of symptoms, which I will call for convenience the Atalanta symptoms, in fact higher in some women than others? (2) When a woman has, say, four of these symptoms or more, does she also show signs in her dreams, her fantasies and her daily life of a repudiation of the female role?

This paper is an attempt to answer the first question.

The Experiment

Two groups of women were compared in respect of the incidence of nine symptoms; that is, the series of symptoms given above, less frigidity and dyspareunia. It was judged best to omit these for reasons which will be mentioned later. The control group (C) contained 40 parous women

attending the Salomons Centre at Guy's Hospital for routine ante-natal and post-natal care. The other group (P) contained 40 parous women who were, or had been, under my care with adaptive disorders. The C group were interviewed by two members of the staff of the Salomons Centre and their medical history was recorded in detail. The data for the latter group were taken from my case records. The age range of the C group was 18 to 39, mean 31.9; that of the P group, 23 to 48, mean 34.6. The mean parity of the former was 1.7, that of the latter 1.9. The spectrum of social class in the two groups was roughly similar. The disorders of the women in the P group were: Tension headache and migraine, 13; skin disorders, 9; asthma, 3; gastrointestinal disorders, 4; tension pain, 4; other disorders, 7.

The criteria for recognition of the symptoms were: (1) Dysmenorrhoea: severe pain at the period over a term of years or throughout life; (2) irregular menstruation: irregularity in the duration or amount of periods or in the interval between them; (3) menorrhagia: excessive bleeding at the period or between periods; (4) amenorrhoea: unexplained absence of menstruation over some months or years; (7) difficult labour: labour unduly prolonged or painful, associated with undue anxiety and distress; (8) 'puerperal reaction': a depressive state or minor illness occurring directly after the birth and as a reaction to it. (5) Abortion or miscarriage; (6) vomiting in pregnancy, and (9) failure of lactation did not present any difficulty in recording, but it was felt that the incidence of frigidity and dyspareunia, as shown by the replies to questions in the C group, was in all probability too low because of the common tendency, in this setting, towards a denial of sexual maladjustment. With some regret, therefore, these two symptoms were omitted from the series.

Results

The incidence of the nine symptoms which are under review is much less in the C group than in the P group. The average number of symptoms recorded per person in the former was 1.6, and in the latter 4.6.

The table of incidence is as follows:-

	Dysmenorrhoea	Irreg. menstruation	Menorrhagia	Amenorrhoea	Abortion/miscarriage	Vomiting	Difficult labour	Reaction	Lactation failure
C Group	16	3	4	1	3	12	10	2	7
P Group	30	22	21	7	13	31	25	15	20

The disparity between the groups is greatest for (2) irregular menstruation, (4) amenorrhoea and (8) puerperal reaction, and least for (1) dysmenorrhoea, (6) vomiting in pregnancy, and (7) difficult labour.

The relative incidence is shown in another form here:—

No. of Symptoms	C Group	P Group
0	9	0
1	11	1
2	11	6
3	3	2
4	1	10
5	1	8
6	0	10
7	1	1
8	0	0
9	0	2

It will be seen that the mode in C group lies between 1 and 2, and in P group between 4 and 6. Three of the former and 31 of the latter had four or more of the nine symptoms.

Comment

The difference in incidence between the two groups is much greater than that which could be accounted for by chance. It would seem that the significance of this result lies not in the higher incidence of individual symptoms, such as amenorrhoea, in the C group, but in the tendency for the symptoms in this series to associate together, so that three-quarters of the P group have four symptoms of the series or more. This concomitance cannot be explained on purely physiological grounds.

The C group is a random sample of the normal child-bearing population of Bermondsey, in the sense that no conscious selective factor was at work in the choice of the women interviewed. The P group was also unselected, in that it contains patients who came under my care after I had begun the practice of recording the Atalanta symptoms; the series is, in other words, more or less consecutive. These women were not referred because of gynaecological complaints, and their symptoms would not have come to notice had they not been especially enquired into. The P group

is, broadly speaking, a random sample of women with adaptive disorders.

The difference in incidence, then, is probably not due to selection of the cases surveyed. The P group has a higher mean age, and contains two women of 45 and one of 48, but this does not affect the result, since the table shows the incidence of symptoms at any time throughout the reproductive life and not merely towards the end of it. The mean parity of P is close to that of C. It is unlikely that the difference in incidence reflects a difference in general intelligence or in sexual education, as the social and educational levels in the two groups are similar.

Though the groups resemble one another in respect of these characters, they differ in at least one important variable: that is, anxiety. The examination of the control subjects included enquiries directed at disclosing the presence of anxiety, as manifested by somatic signs and mental symptoms. As judged by the responses to these enquiries, and by observation of demeanour and behaviour, the control subjects were not, as a group, anxious people. Evidence of mild anxiety was found in three women, and of severe anxiety in two; in the remainder it was negligible. The P group, on the other hand, were all anxious in greater or lesser degree. It is fair to conclude, therefore, that anxiety is one major determinant of the Atalanta symptoms. From a comparison of the relative incidence, anxiety appears to produce its greatest disruptive effect on menstruation (irregularity, amenorrhoea) and upon the post-partum state ('puerperal reaction'). The incidence of menstrual irregularity is seven times as high in the P group, but dysmenorrhoea occurs only twice as often. Vomiting in pregnancy and difficult labour appear to be less affected by anxiety than, say, menorrhagia, but even here the incidence is more than twice as great.

The first question in the introductory paragraph is thus answered in the affirmative; the incidence of the Atalanta symptoms is much higher in a group of women with adaptive disorders than in a comparable group of normal women. Whether this high incidence is associated with a specific conscious or unconscious attitude to menstruation and reproduction cannot be answered from the data at our disposal. It is hoped that a further survey, now under way, will provide the material which is needed to answer this second question.

Summary

Two groups of 40 women, one group of normal controls and one of patients with various adaptive disorders, similar in age, parity and social class, were compared in respect of the incidence of nine symptoms: Dysmenorrhoea, irregular menstrua-

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tion, menorrhagia, amenorrhoea, abortion and miscarriage, vomiting in pregnancy, difficult labour, post-partum illness or depression and failure of lactation.

The incidence of these symptoms was found to be much higher among the patients than among the controls. Since anxiety was present in all of the former, and was absent or slight in the latter,

it appears that anxiety is a major determinant of this association of symptoms.

Acknowledgment

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BOOKS RECEIVED

The Editorial Board acknowledge with thanks receipt of the following volumes. A selection from these will be made for review.

'Incontinence in Old People.' By John C. Brocklehurst, M.D. Pp. xiii + 191, with 62 illustrations. Edinburgh: E. and S. Livingstone. 1951. 30s.

'Selected Writings of Sir William Osler—12th July, 1849—29th December, 1919.' Edited by A. White Franklin. Pp. xx + 278, with 5 illustrations. London: Geoffrey Cumberlege, Oxford University Press. 1951. 15s.

'Primary Carcinoma of the Liver.' By Charles Berman, M.D., B.Ch.Rand. Pp. xvi + 164, with 83 illustrations. London: H. K. Lewis. 1951. 35s.

'A Pathology of the Eye.' By Eugene Wolff, M.B., F.R.C.S. 3rd Edition. Pp. vii + 364, with 318 illustrations, including 5 in colour. London: H. K. Lewis. 1951. 55s.

'How I Cured My Duodenal Ulcer.' By John Parr. Pp. 60. London: Michael Joseph. 1951. 8s. 6d.

'The Pharmacology and Therapeutics of the Materia Medica.' By Walter J. Dilling, M.B., Ch.B., M.P.S. (Hon.). 19th Edition. Pp. xxxii + 598. London: Cassell and Co. 1951. 21s.

'A History of Medicine. Vol. 1: Primitive and Archaic Medicine.' By Henry E. Sigerist, M.D., D.Litt., LL.D., Dr.H.C. Pp. xxi + 564, with 104 illustrations. New York: Oxford University Press (London: Geoffrey Cumberlege). 1951. 45s.

'British Encyclopaedia of Medical Practice, Vol 5.' Edited by The Rt. Hon. Lord Horder, G.C.V.O., M.D., F.R.C.P. 2nd Edition. Pp. xv + 736, with 173 illustrations and 6 coloured plates. London: Butterworth and Co. 1951. £3.

'Prostitution and the Law.' By T. E. James, M.A., B.C.I. Pp. ix + 160. London: William Heinemann. 1951. 21s.

'Modern Practice in Infectious Fevers, Vols. 1 and 2.' Edited by H. Stanley Banks, M.A., M.D., F.R.C.P., D.P.H. Pp. xxiv + 1054, with 211 illustrations and 3 coloured plates. London: Butterworth and Co. 1951. £5 for 2 vols.

'Bronchial Asthma.' By R. J. Whiteman, M.B., Ch.M.(Syd.), F.R.A.C.S. Pp. xi + 184. London: H. K. Lewis. 1951. 15s.

'Disease in Infancy and Childhood.' By Richard W. B. Ellis, O.B.E., M.A., M.D., F.R.C.P. Pp. vii + 695, with 300 illustrations. Edinburgh: E. and S. Livingstone. 1951. 42s.

'Recipes for Light Diets.' By E. M. Shipley and H. M. Dundas. Pp. ix + 38. London: J. and A. Churchill. 1951. 3s. 6d.

'Bacterial and Virus Diseases.' By H. J. Parish, M.D., F.R.C.P.E., D.P.H. 2nd Edition. Pp. viii + 204, illustrated. Edinburgh: E. and S. Livingstone. 1951. 10s. 6d.

'Medical Botany.' By Alexander Nelson, Ph.D., D.Sc., F.R.S.E. Pp. xi + 544, with 29 illustrations. Edinburgh: E. and S. Livingstone. 1951. 30s.

'Biology Staining Schedules for First Year Students.' By R. R. Fowell, M.Sc., 4th Edition. Pp. 27. London: H. K. Lewis. 1951. 2s. 6d.

'Royal Northern Operative Surgery.' Edited by Sir L. Barrington-Ward. 2nd Edition. Pp. viii + 638, with 498 illustrations. London: H. K. Lewis. 1951. 90s.

'Good Health with Diabetes.' By Ian Murray, M.D., F.R.F.P.S.G., F.R.C.P.E., and Margaret B. Muir, S.R.N. 2nd Edition. Pp. iv + 44. Edinburgh: E. and S. Livingstone. 1951. 2s.

'The Control of Cross Infection in Hospitals.' (Medical Research Council Memo. No. 11.) By the Cross Infection in Hospitals Committee of the M.R.C. Revised Edition. Pp. 51, with 6 illustrations. London: H.M.S.O. 1951. 1s. 9d.

'Spleen Puncture.' By Sven Moeschlin (Zurich). Translated by A. Piney, M.D. Pp. xi + 229, with 55 illustrations. London: William Heinemann. 1951. 30s.

'Gynaecological Endocrinology for the Practitioner.' By P. M. F. Bishop, D.M. 2nd Edition. Pp. ix + 132. Edinburgh: E. and S. Livingstone. 1951. 12s.

'The Essentials of Modern Surgery.' Edited by R. M. Hanfield-Jones, M.C., M.S., F.R.C.S., and Sir Arthur E. Porritt, K.C.M.G., C.B.E., M.A., M.Ch., F.R.C.S. 4th Edition. Pp. xv + 1263, with 641 illustrations, many in colour. Edinburgh: E. and S. Livingstone. 1951. 55s.