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Postpartum Mania

By ARNOLD KADRMAS, GEORGE WINOKUR and RAYMOND CROWE

SUMMARY Twenty-one patients with bipolar affective disorder (20 manic episodes, one depressive episode) during the postpartum period were evaluated. They were compared to an unselected group of women with bipolar histories, as well as to a matched control group. The postpartum group had significantly more Schneiderian symptoms and fewer recurrences of illness within the three-year period after the index admission. There was a notable trend toward postpartum patients having fewer affectively ill relatives than the controls. The practical significance of these findings with regards to lithium therapy is discussed, as is the theoretical significance in terms of heterogeneity of the bipolar syndrome.

Previous findings have indicated a relationship between manic-depressive (bipolar) episodes and the postpartum state (Reich and Winokur, 1970). In manic-depressive patients, it appears that there is a special risk for an episode to occur in the puerperium. Also, having had an affective postpartum episode seems to predispose patients to further puerperal episodes.

The present study deals with the following questions: Does postpartum mania have any specific characteristics? Does a patient suffering postpartum mania have a different outcome from the person with mania at another time? Finally, is the family history of an individual with postpartum mania any different from the family history of a person with non-puerperal mania? Any differences would suggest aetiological heterogeneity within the manic depressive (bipolar) syndrome.

Subjects and Methods

As part of a larger study of bipolar illness, the records of consecutively admitted patients to the University of Iowa Psychiatric Hospital between 1920 and 1950 were systematically evaluated. One hundred and fifty-seven females had ever experienced a mania. Of these, 147 (94 per cent) fulfilled Feighner research criteria for bipolar affective disorder (Feighner *et al*, 1972). The remainder had a clinical diagnosis of bipolar illness, but the time course was not adequately documented in the chart and it was impossible to determine whether the patient strictly fulfilled the criteria. In 21 of the 157 patients, the affective illness which resulted in the index admission began during the postpartum period, which was defined as the period of six weeks from delivery.

The 21 patients with affective symptoms in the postpartum period (postpartum group) were compared to the 136 patients with affective symptoms outside the postpartum period for presence or absence of Schneiderian first-week symptoms during their illness.

Schneiderian symptoms were defined as: (a) thought broadcasting, an experience that the patient's thoughts were escaping from his head aloud into the external world; (b) experiences of alientation, the experience that the patient's feelings, impulses and thoughts or actions are not his own but controlled by an outside force; (c) experiences of influence, the experience that the patient's body sensations, feelings, impulses, thoughts and actions are imposed upon him by some external agency; (d) complete auditory hallucinations, prolonged voices coming from outside the patient's head

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which continually comment about the patient's actions, argue about the patient's behaviour or repeat aloud the patient's thoughts. Another symptom that was rated is delusional perception or symbolism. In this, a perception has a special meaning to the patient and may lead to an elaborate secondary delusional system. A delusional perception is similar to what has been called a primary delusion.

An example of a person who was considered to have first-rank symptoms was a 21-year-old postpartum woman who was admitted in 1933. In the chart, the following statement was found —"recently she has been preoccupied with the thought of television and with the idea of thought and speech being collected by radio, sorted out, and then transmitted throughout the state". The same patient had a delusional perception in that she believed that spectacles, (eye glasses) meant television. She believed that her thoughts were being recorded. The chart diagnosis was 'manic-depressive, manic'. In another case, a 20-year-old woman with a diagnosis of manic-depressive illness 'began to talk about a message from her dead father, telling her to make the right hand do as much as the left, and forced her husband into elaborate ceremony in assisting with the housework'. A third example occurred in a woman of 26 who was admitted in 1936. An extract from the chart is that—'She felt that her home doctor hypnotized her and had a power over her so that he could impose strange things on her. For instance, he made her skin itchy and made her want him and asked him to kiss her'.

Of the 251 total patients in the study (94 males and 157 females), 39 had one of the above symptoms, 23 had two symptoms, five had three symptoms and two had two symptoms during two or more admissions.

Also, the 21 patients in the postpartum group were compared to a control group of 21 patients to see if there were differences in outcome. The control patients were fertile females, who were matched as closely as possible for age of onset. Further, in order to select controls who were in the hospital at the same period of time as the postpartum patients (to control for similar follow-up care), the groups were matched on the decade of index admission. The mean age of onset for the postpartum group was 22.1 years and for the control group was 25.2 years. Twenty of the 21 postpartum patients were manic at time of index admission, the other being depressed, and this proportion was identical in the control group of 21.

The quality of follow-up material gathered on these patients has been described previously (Morrison *et al*, 1973). The records contained a psychiatric history, past medical history, a complete family history with itemization of parents, siblings, children, as well as of extended family members, and a current mental status. Reports of laboratory studies and consultations, diagnosis, progress and treatment notes, discharge notes and final disposition were all included in the chart. There was an extensive social history recorded. In many cases, this was the result of interviewing a variety of informants —family members, as well as friends and acquaintances. The family history, in addition to itemizing each member of the family, often told of the origins and provided a symptom review in the case of those who were ill. All patients were interviewed by the Director of the Hospital; that interview covered between two and five single-spaced typewritten pages, and was recorded verbatim. Follow-ups were routinely done by the social workers in the hospital at six-month and one-year intervals by sending out questionnaires and letters to patients or their families. Frequently, telephone follow-ups were made as well. In the charts are letters from other hospitals, requesting information and giving information. Readmissions were kept together in the same chart. For the entire group of 251 patients, 89 per cent had a follow-up of six months or more; only 4 per cent had no follow-up at all.

The mean post-index follow-up for the postpartum patients was 3.4 years and for the control group it was 5.9 years.

In addition to the clinical symptomatology and follow-up material, the postpartum patients were compared to the control group on the variable of psychiatric illness in family members.

Results

In the comparison of the 21 postpartum patients with the 136 remaining females, it was

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found that 13 of 21 (62 per cent) of the postpartum patients had Schneiderian symptoms as defined by Taylor (1972) during their index illness; only 38 of the remaining 136 (28 per cent) had such symptoms. The finding is significant ($\chi^2 = 8.08$, df = 1, P <.005).

The 21 postpartum patients were then compared with 21 controls on the variable of a recurrence of affective illness during the three years following index admission. There were no recurrences amongst the postpartum patients outside of the postpartum period; one patient in the postpartum group was readmitted for an affective illness during the three-year follow-up, but this occurred during a subsequent postpartum period. For recurrences outside the puerperium, the postpartum group is significantly different from the matched controls ($\chi^2 = 4.86$, df = 1, P <.05). Of the six recurrences of illness in the controls, five necessitated admissions to psychiatric hospitals and one outpatient treatment in the University of Iowa Psychiatric Clinic.

Table I presents a comparison of the family histories between the postpartum group, the 21 controls, and the 136 female manics.

If a relative suffered from an illness with common affective symptoms, from which he recovered without significant personality defect with or without psychiatric hospitalization, we considered him to have had an affective disorder. Almost all cases had significant social incapacity because of their affective illness and this was noted in the systematic family history which was taken by the social worker. Further, many cases had been seen by psychiatrists or had been in the hospital. In cases where the criteria were equivocal, the family member was considered to have an undiagnosed psychiatric illness. No effort was made to separate neurotic from endogenous depression. The significant point was a social incapacitation, regardless of the subtype. Though the control groups showed a consistently higher frequency of psychiatrically ill family members than the postpartum group, the differences did not reach statistical significance.

Discussion

The results of this study indicate that patients who show postpartum mania are more likely to have Schneiderian-type delusions and hallucinations than female patients who have mania outside of the postpartum period. Such postpartum patients also appear to be less likely to have recurrent episodes of illness outside the postpartum period. This finding would suggest that patients who have a postpartum mania probably should not be placed on prophylactic lithium carbonate, as they are likely to have a good prognosis without it. However, because such patients are likely to suffer recurrent postpartum episodes, it might be reasonable to begin such patients on lithium carbonate for several weeks following any subsequent deliveries.

Differences in the course and clinical picture of patients with postpartum mania indicate the possibility of heterogeneity within the bipolar syndrome. The fact that such patients have a less positive family history than those who have episodes independent of the postpartum period supports this possibility. These findings, how-

TABLE I

Family history comparison between post-partum group, matched controls and total female manic group

	Post partum	Matched controls	All female manics
N	21	21	136
N w/ an affectively ill 1° relative	4 (19%)	8 (38%)	41 (36%)
N w/ a 1° relative who had affective illness or alcoholism	5 (24%)	10 (48%)	53 (39%)

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ever, do not prove heterogeneity. It is certainly possible that all patients who show a manic episode have the same illness, but that some people need a stronger stimulus to bring out the illness. This could be on the basis of a polygenetic predisposition for bipolar illness, with the patients showing postpartum episodes also having fewer of the genes. Nevertheless, it is possible that such patients may have an entirely different illness from the ordinary bipolar patient.

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