Depression in Family Practice: Long-Term Prognosis and Somatic Complaints

Remi J. Cadoret, MD, Reuben B. Widmer, MD, and Carol North
Iowa City, Iowa

Somatic pain, functional, and anxiety complaints of 154 depressed patients were followed during the course of their initial depression and were found to parallel the depression: these complaints increased in number just prior to diagnosis of depression and decreased to normal levels after one year's treatment of the depression. Persistence of these types of somatic symptoms after one year's treatment predicted eventual chronicity of the depression. Older patients were also more likely to develop chronic depressions, and there was some indication that those individuals who had an initial remission of a depression followed by a second depression which then became chronic had longer first depressions.

In a previous paper,[1] patients were found to increase their number of visits to a family physician prior to being diagnosed as depressed. At the same time somatic complaints consistent with anxiety and with varied "functional" disorders increased significantly. This presented a picture of a developing depression characterized by multiple somatic complaints.

In a remitting but recurrent condition such as depression, prognosis of the course of the illness is important for primary care. Since these same patients were followed over a number of years, one of the purposes of this paper is to detail the changes in complaints as the depression was treated. One of the features of depression is the tendency in a certain number of individuals to run a chronic course in contrast to the more usual remitting one. In samples of hospitalized depressed patients, older females have been described as having increased chances for developing a chronic depression. Other factors associated with longer episodes and chronicity are age of onset of depression and pre-existing deviant personality features. These studies, however, are based on individuals with more serious or severe depressions as evidenced by the need for hospitalization. In family practice, depressed patients represent on the average a less seriously ill group and accordingly most are treated successfully as outpatients. Prediction of chronicity or of a protracted course in such a different group is necessary in primary care. Accordingly, a further purpose of this paper is to determine whether somatic complaints might be of prognostic value in predicting the course of depression.

Methods

Sample selection was described in a previous paper.[1] One hundred fifty-four depressed patients were studied who were treated over a 24-year period in a solo family practice. Depressions included both exogenous and endogenous types. Diagnosis was usually made on the basis of a low or depressed mood associated with other symptoms of depression such as low energy and insomnia. Functional, pain, and anxiety complaints did not alone suffice for a diagnosis of depression.

In order to characterize changes in symptoms over time, 4 seven-month periods were sampled as shown graphically in Figure 1:

Period 1—starting 19 months prior to date of diagnosis

From the Departments of Psychiatry and Family Practice, University of Iowa, School of Medicine, Iowa City, Iowa. Requests for reprints should be addressed to Dr. Remi J. Cadoret, Department of Psychiatry, University of Iowa, Iowa City, IA 52242.

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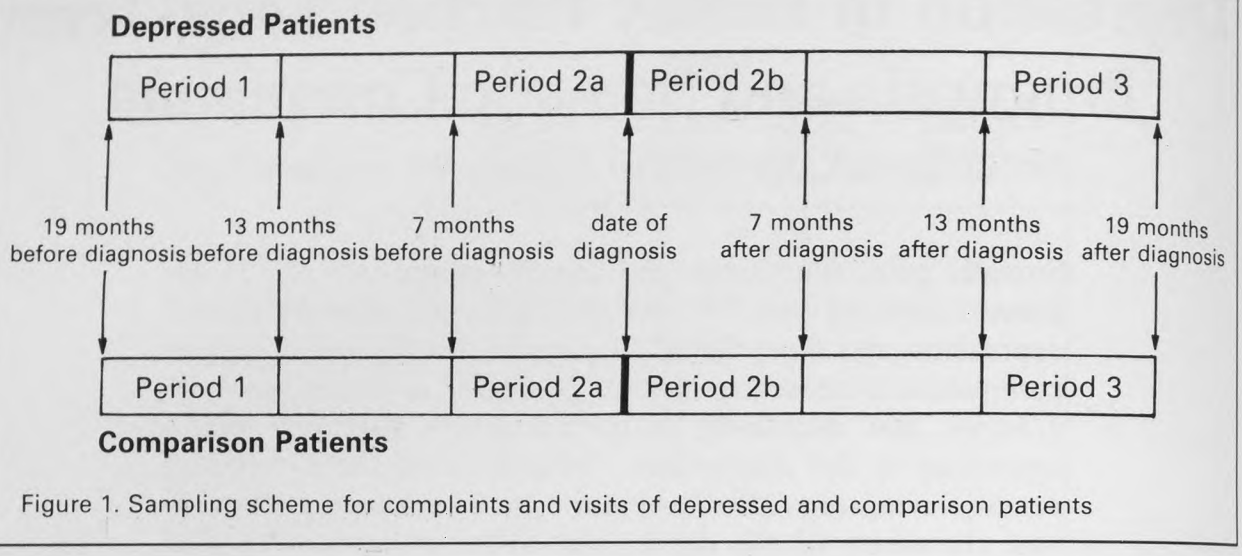

Figure 1. Sampling scheme for complaints and visits of depressed and comparison patients

Period 2a—starting 7 months prior to date of diagnosis

Period 2b—starting at date of diagnosis of depression

Period 3—starting 1 year after date of diagnosis of depression.

Number of office visits and number and type of patient complaints were recorded for each of these periods.

Patient complaints for each of these periods were divided into the categories described in reference 1 as: definite diagnoses, infections, (functional) pain complaints, other functional somatic complaints, and anxiety complaints.

Comparisons of incidences of factors between depressed and control groups were analyzed by chi-square test and reported (two-tailed) as significant if the five percent level was achieved. Contrasts within the depressed group involving changes in reported symptoms from one period to the other were analyzed by the sign test and these are reported significant if the two-tailed probability reached at least the five percent level.

Results

Course of Complaints During Depression

Figure 2 shows the percentage of depressed patients with definite diagnoses, infections, pain complaints, functional complaints, and anxiety complaints during the seven-month period immediately following diagnosis of depression (period 2b) and the seven-month period starting one year after the diagnosis of depression (period 3). For comparison, the same type of data for periods 1 (the seven-month period starting 19 months previous to diagnosis) and 2a (the seven-month period starting seven months prior to diagnosis) are included in the table. Because age and sex breakdown of these data showed no statistically significant differences, results for the total depressed sample are presented.

Number of pain, functional, and anxiety complaints peak in the periods just before the diagnosis of depression is made (period 2a), and decline thereafter during the period of active treatment (period 2b). One year later (period 3) they appear at approximately the levels shown by individuals one year before their diagnosis of depression (period 1). That these particular complaints parallel the course of the episode of depression is further borne out by the following finding: at one year's time (period 3), 16 of the original 154 patients were described in the clinical record as still depressed. Fifteen of these 16 (94 percent) had at least one symptom in the pain, functional, and anxiety complaint categories. In contrast to this, when depression was not mentioned during period 3, only 42 of the remaining 135 patients (31 percent) had a symptom in the pain, functional, or anxiety category (χ^2 difference=21.29, df=1, $P<.001$). When the pain, anxiety, and functional

complaints of these 16 depressed patients in period 3 are subtracted from those of the nondepressed patients, the incidence of all three types of complaints for the entire sample is lowered to that shown one year previously.

Definite diagnoses show a significant increase in number in period 2b compared to period 2a as determined by the sign test, but this is due almost entirely to individuals who returned for check-ups while on antidepressant medication. Otherwise the quality of definite diagnoses did not materially change from period 2a to period 2b. The dip shown in the definite diagnosis line (Figure 2, line 1) from period 2b to period 3 reflects mainly the decrease in visits for antidepressant medication check-ups and is not statistically significant.

Infection diagnoses (Figure 2, line 2 from top) show slight but insignificant changes from period 2a to period 2b, and from period 2b to period 3. The increase shown from period 1 to period 2b, however, is statistically significant. The increase in number of infection diagnoses is not due to a qualitative change in the diagnosis, since during *each* of the four time periods about 50 percent of the infection diagnoses involved the respiratory tract: bronchitis, sinusitis, upper respiratory tract infection, or pharyngitis.

Individuals who had a larger number of functional complaints during periods 2a and 2b tended to have larger number of pain complaints during these same periods. Although these correlations as tested by a 2×2×2 contingency table were substantial, the majority of patients during both periods had no pain or functional complaints. However, if an individual had a functional complaint during period 2a, he was more likely to have a functional complaint during period 2b as well, but the quality of the complaint was often different from one period to the next so that the clinical picture was one rather of shifting functional complaints than persistence of one type of complaint throughout both periods.

In summary, the course of pain, functional, and anxiety complaints appears to parallel the course of depression. The quality of functional complaints during period 2b when almost all patients were receiving tricyclic antidepressants does not suggest they are medication side effects since overall they are similar to the quality of complaints seen during period 2a when no antidepressant medication had been prescribed.

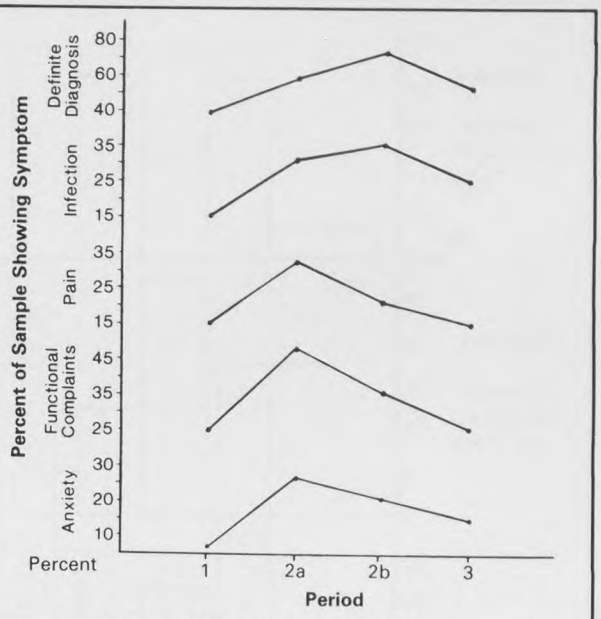

Figure 2. Complaints in depressed patients by period

Chronic Depression

Of the 154 index depressed patients, a substantial number remained on the antidepressant medication (almost invariably a tricyclic antidepressant) over an extended period of time during the 24 years covered by this study. The physician (RBW) generally tried to taper the medication during the 6- to 12-month period following initiation of antidepressants, but often found that symptoms recurred, requiring an increase in antidepressant dosage. The latter maneuver was almost always effective in causing symptoms of depression to remit.

Of the 154 depressed patients, 61 (39 percent) were on antidepressant medication for one or more years. For analytical purposes these patients were dichotomized into a "short chronic" group composed of individuals who took antidepressants for one year to three years and eleven months (N=33) and a "long chronic" group composed of individuals taking antidepressants for four years or longer (N=28).

Approximately two thirds of the individuals comprising these two chronic groups were female. This sex ratio is indistinguishable from that found in the remaining 93 nonchronic depressed patients. In contrast, age of onset of index depression proved to be a significant factor associated with

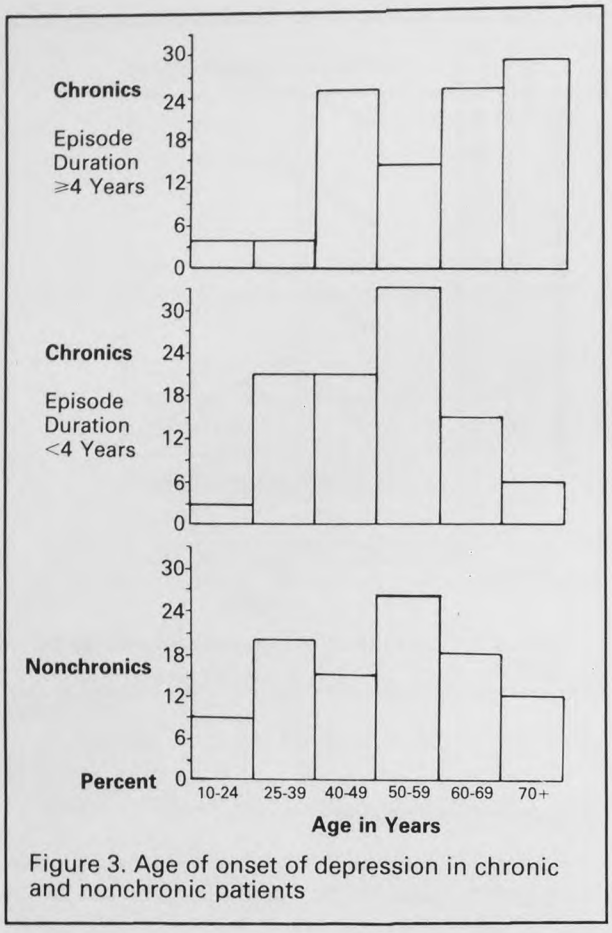

Figure 3. Age of onset of depression in chronic and nonchronic patients

chronicity. Figure 3 shows histograms of age of onset of index depression for "long chronic," "short chronic," and nonchronic depressed groups. The "long chronics" had a significantly older age of onset of index depression as determined by testing the difference between age distributions shown in Figure 3 by χ^2. Average age of onset for "long chronics" of 63.4 years contrasted with 52.3 years for "short chronics."

One other condition was found to be predictive of chronicity: if an individual had either a pain, functional, or anxiety complaint one year after the time of index diagnosis of depression that person was more likely to fall into the "long chronic" group. This is shown in Figure 4 in which number of pain, functional, and anxiety complaints of "long chronics" are contrasted with those made by an age- and sex-matched comparison group from the nonchronic depressed patients. It is apparent that both groups have similar incidences of these complaints just prior to diagnosis of depression (periods 1 and 2a) and immediately after diagnosis of depression (period 2b), but diverge significantly at one year (period 3). The difference shown by chi-square test between 61 percent and the comparison group's 26 percent is significant at the five percent level. For this last period the comparison group returned to the one-year predepression level (period 1) but the "long chronic" group remained elevated. The "short chronic" group, on the other hand, was indistinguishable from an age- and sex-matched comparison group from the nonchronic depressed patients. This evidence for somatic symptoms persisting for one year suggests that these individuals may have longer depressions. To check this the authors looked at the length of depression in the nine "long chronics" patients who had one episode of depression with a remission prior to the onset of their chronic depressions. Comparing these nine "long chronics" with nine age- and sex-matched controls from the nonchronic group, it was found that seven of the nine "long chronics" had longer depressions than their controls, with a mean length of 2.2 years for "long chronics" vs 0.3 years for the nonchronic controls. This difference is not statistically significant when tested by both the sign test and the median test. Further, at one year's time after diagnosis of their first depression which remitted (period 3), eight of these nine "long chronics" (89 percent) had at least one pain, functional, or anxiety complaint. Thus, there is only suggestive evidence that length of first depression (in those who have more than one episode) might predict chronicity, and that somatic symptoms (pain, functional, or anxiety complaints) present as late as one year after diagnosis of depression predict eventual chronicity.

Discussion

This study has found a correlation of the incidence of varied somatic complaints with the course of depression. Although many individuals with depression do not complain of somatic symptoms, when they do so they are more likely to report other somatic complaints as well while depressed. With remission of depression the number of somatic complaints decreases. Even during treatment for depression, however, new somatic complaints are likely to develop which do not necessarily represent medication side effects, nor do they correlate with type of somatic symptoms present earlier in the course of the depression.

The shifts of somatic symptoms observed in the

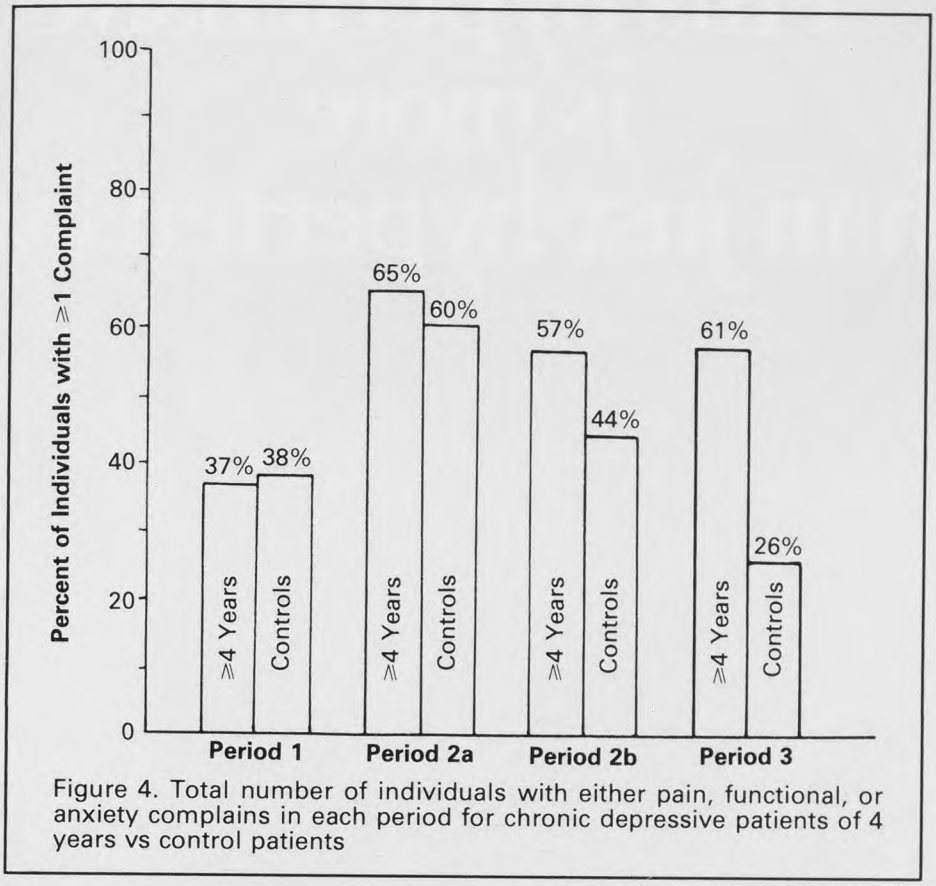

Figure 4. Total number of individuals with either pain, functional, or anxiety complains in each period for chronic depressive patients of 4 years vs control patients

longitudinal course of some of these depressed patients suggest that appearance of somatic symptoms during a depression need not elicit a flurry of diagnostic tests on the part of the primary care physician. Rather, a careful history would reveal that the complaints might better be ascribed to the depression (if not a side effect of medication) and treated as such. The complaints in the pain, functional, and anxiety categories found in this study did not suggest a diagnosis which had to be immediately and extensively pursued with an elaborate work-up. This finding suggests that the physician should temporize in dealing with these complaints in a depressed patient. Time is a powerful tool which can work to the advantage of both the family physician and his/her patients. If the somatic complaints do not clear with amelioration of the depression, then further diagnostic maneuvers are indicated. Obviously one cannot temporize with complaints which suggest serious medical emergencies, such as symptoms of acute appendicitis.

The presence of somatic symptoms 12 to 19 months after the diagnosis of depression appears to predict a more chronic course. The somatic symptoms in some individuals appear to be associated with a longer episode of depression when remission does occur, and length of first depression does predict a "long chronic" course.

The finding that greater age of onset of depression is associated with chronicity is consistent with findings reported by Winokur et al,[2] in a sample of hospitalized patients from the state of Iowa, where age at onset of last depression was predictive of chronicity in the female patients. Thus, age of onset could be a valid predictor of eventual chronicity of depression; however, more studies of outpatient samples to confirm the present findings in one family practice are in order.

References

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