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Antecedents, concomitants and consequences of anger attacks in depression

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Abstract

Anger attacks are episodes of intense anger with autonomic arousal, which occur in response to often trivial provocations. This study explores some of the antecedents, concomitants, and consequences of anger attacks in patients with depression. The sample comprised three groups: depression with anger attacks ($n=20$), depression without anger attacks ($n=20$) and normal controls ($n=20$). Subjects were administered the Mini International Neuropsychiatric Interview, the Anger Attack Questionnaire, Irritability, the Depression Anxiety Scale, the State-Trait Anger Expression Inventory, the Psychoticism Extraversion Neuroticism Inventory, the Hassles Scale, the World Health Organization Quality of Life-BREF Version and the Dysfunctional Analysis Questionnaire. Depressed patients with anger attacks exhibited more suicide-related phenomena and dysfunction scores in comparison to depressed patients without anger attacks. Depressed patients with anger attacks also had higher scores of anxiety, irritability, trait-anger, anger-out, anger expression, psychoticism, hassles, and poor quality of life in comparison to the other two groups. In conclusion, anger attacks adversely affect the lives of depressed patients and their family members and may serve as a qualifier for partially distinct syndrome of depression.

Keywords: Depression; Anger; Aggression; Anxiety; Hassles; Dysfunction

1. Introduction

Anger attacks are characterized by a rapid onset of intense anger and a crescendo of autonomic arousal and often occur in response to trivial provocations (Fava et al., 1991). Such attacks have been reported more often in depressed patients than in normal controls (Fava et al., 1991, 1993a,b, 1997). Patients of depression (major depression, dysthymia, atypical depression and seasonal affective disorder-depression) with anger attacks are reported to differ from those without such attacks in terms of comorbid psychiatric disorder, symptom-profile, personality traits and biological variables (Fava et al., 1991, 1993a,b; Rosenbaum et al., 1993, 1997; Mammen et al., 1999; Winkler et al., 2005a,b).

The factors that might influence the occurrence of anger attacks in depression and the possible consequences of these attacks in the lives of depressed subjects and their caregivers have not been well studied. Based on our earlier review (Painuly et al., 2005), we hypothesised that compared to normal controls depressed patients with anger attacks would have higher scores on measures of neuroticism and psychoticism [subcomponent of neuroticism and psychoticism dimensions, respectively

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(Digman, 1990)]; perceived stress (daily hassles); severity of anger, irritability, depression, and anxiety; and dysfunction and quality of life. Also, that depressed patients without anger attacks would have an intermediate position for the above variables except severity of depression and neuroticism, which would be expected to be similar to that of depressed patients with anger attacks.

The aim of the present study was to examine whether depression with and without anger attacks differed in terms of the antecedents (personality variables and daily hassles), concomitants (severity of anger, irritability, depression, and anxiety and occurrence of comorbid disorders) and consequences (dysfunction and quality of life).

2. Methods

The study was approved by the institutional ethics committee. A cross-sectional design was used. The sample, recruited from January 2001 to December 2001, included three groups of 20 subjects each — one index group and two control groups. The index group comprised depressed patients with anger attacks. The control groups included a normal control group and a disorder group — depressed patients without anger attacks. Subjects in the two depressed groups were inpatients/outpatients of a tertiary care hospital in North-Western India. The healthy controls were selected from staff members in government offices. All subjects provided a written informed consent.

The index group formed a purposive sample. The two control groups were group matched with the index group for age, gender, and economic status. All patients, in the age range of 18–50 years, fulfilled the DSM-IV criteria for major depressive disorder according to the Mini International Neuropsychiatric Interview (MINI) (Sheehan et al., 1999). Patients with co-morbid major medical or surgical conditions, substance abuse (excluding tobacco), organic mental disorders, and psychotic disorders (including depression with psychotic symptoms) were excluded from the study. The subjects were included in the index group only if they met the criteria for anger attacks (Anger Attack Questionnaire by Fava et al., 1991) and had had at least one characteristic anger attack in the last month.

Subjects in all three groups were administered the following interviews/questionnaires in the same invariant order: (1) MINI (Sheehan et al., 1999), (2) Anger Attack Questionnaire (Fava et al., 1991), (3) Clinical profile sheet to record durations of illness and treatment, type of pharmacological treatment, past history of illnesses, family history of psychiatric disorders, aggressive acts in the preceding month (threatening to leave, refusal to talk or sulking, yelling, stamping out or slamming the door, breaking and throwing objects — not at a person, throwing objects at a person, threatening to physically hurt and trying to physically hurt) (Mammen et al., 1999), direction of aggressive acts (relationship with the person targeted) (Mammen et al., 1999), (4) Irritability, Depression and Anxiety Scale (Snaith et al., 1970), (5) State-Trait Anger Expression Inventory (Spielberger and Sydeman, 1994), (6) Hassles Scale (Kanner et al., 1981), (7) Psychoticism Extraversion Neuroticism (PEN)-Hindi Inventory (Menon et al., 1982), and (8) World Health Organization Quality of Life-BREF Hindi version (Saxena et al., 1998). In addition, patient groups were administered the Dysfunctional Analysis Questionnaire (Pershad et al., 1985). The PEN, WHOQOL-BREF and DAQ have been validated in Hindi speaking samples.

Chi-square test, Fisher's Exact test and Mann–Whitney *U* test (for non-parametric variables) and unpaired *t* test and analysis of variance (ANOVA) (for parametric variables) were computed to examine group differences. Significant group differences were tested by post hoc two by two chi-square test (with Yates correction if applicable), and Least Square Difference statistic.

3. Results

The mean ages of depressed patients with and without anger attacks and normal control subjects were 35.55±10.42, 34.25±9.29, and 31.7±6.88 years, respectively. Females comprised 65% of the index group and 45% each of the two control groups. Prior group matching ensured that the three groups were similar on socio-demographic parameters. The depressed patients with anger attacks reported more suicide-related phenomena than depressed patients without anger attacks ($\chi^2=6.66$, $d.f.=1$, $P=0.010$). The two depressed groups were similar for all other clinical features recorded on the clinical profile sheet including the mean durations of illness (29.65±49.45 and 11.55±21.50 months, respectively), and treatment (9.35±20.29 and 2.47±3.55 months, respectively).

As shown in Table 1, the three groups differed on all subscales of Irritability, Depression, and Anxiety Scale ($P<0.001$). On post hoc pair-wise comparison, the two depressed groups had greater depression, anxiety, irritability-inward and total irritability scores in comparison to normal controls ($P<0.05$). Depressed patients with anger attacks had greater outward irritability in comparison to normal controls ($P<0.05$). Depressed patients with anger attacks had higher scores on anxiety,