

Depression in Patients with Non-organic Chronic Intractable Pain

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Abstract

Two hundred patients with chronic intractable pain have been evaluated to identify various depressive features. 72% patients had identifiable psychiatric illness, commonest being Neurotic depression and Anxiety states. The common symptoms reported on the Present State Examination (PSE) were worrying (77%), depression (40%), loss of interest (31.5%), hopelessness (16.5%), loss of weight (18%), and suicidal ideas (8%) and irritability (41.5%). Depressed mood, irritability, loss of appetite and weight are significantly more ($P < .05$) in elderly patients. There was no correlation with sex. The role of anti-depressants in management of such cases and the implications of depressive symptoms is discussed.

Key words -

**Chronic pain,
Psychiatric illness
Depression,
Irritability**

Psychiatric problem in association with chronic pain are numerous. The commonest association is with depressive disorders where pain has been reported as a common symptom [1], [2], [3] and [4], or as a variant of depressive disease [5] and [6], or many share a common pathogenesis [7], [8]. Various authors [4], [9] and [10] have reported pain as a symptom in 56-65 percent of patients with depressive disorders while Ward et al [11]. reported pain as a symptom in 100 percent of their patients with anxious depression. Large [12] described his pain clinic patients to be having depression, personality disorder, traumatic neurosis, anxiety, hysteria and drug dependence, however, depression was commonest (30%). Pain has been reported from India in patients suffering from such psychological illnesses as depression, and hysteria [13], [14], [15] and [16]. On the other hand certain authors [17], [18] reported seeing very few patients with a depressive illness in the pain clinics.

Chronic pain may present as a symptom of depression, may lead to depression, or may be a substitute for depression. However, the present knowledge is inadequate especially from India regarding the exact frequency of depressive symptoms and illness in patients suffering from chronic pain. Such knowledge could be useful towards understanding of chronic pain and planning effective management of such patients. Considering that it is a widely prevalent problem in our country and that there may be important relationships between chronic pain and depressive disorders and symptoms, the

present study has been carried out.

Material and Methods

Two hundred consecutive new patients reporting to various medical, surgical and pain clinics of Postgraduate Institute of Medical Education and Research, Chandigarh were included after screening. The sample included patients with the first or second volunteered complaint of 'pain' of duration of three months and if the pain free period has not exceeded 4 days at a time. For the purpose of this study, pain was operationally defined as the complain of 'pain' referred to the body or any part of it. Patients below 15 years of age or above 65 years of age and those with gross organic lesion sufficient to explain the severity of pain were excluded. The patients thus included in the study were examined and interviewed clinically to collect data regarding their :

- i) Socio-demographic characteristics, as age, sex, Marital Status, religion, education, occupation and residential background.
- ii) Clinical characteristics of pain as the site of pain, quality of pain, severity, duration and frequency of pain.
- iii) Psychiatric examination using the Present State Examination (PSE) was done and psychiatric and ph [19].

These details were taken from the patient as well as reliable informants accompanying the patient.

Results

Description of Sample: (Table I)

Table I - Characteristics of Sample (N=200)

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The mean age of the sample was 38.24 ± 11.89 . 28.5 percent of patients belong to age group 15-29 years; 38.5 percent to 30-44 percent and 33 percent to age group between 45-65 years. There were 56.5 males and 43.5 percent females; 19.5 percent were single, 80.5 percent married and 68.5 percent were Hindus and 29.5 percent were Sikhs. 52 percent of subjects were educated beyond high school, 27 percent matriculate and 21 percent were illiterate or educated upto primary school. Under the occupational classification housewives (31.5%) outnumbered all other categories. Clerical and unskilled category accounted for 31 percent and 27 percent belonged to the professional and semi-professional group. 85 percent patients came from urban background. The clinical description and characteristics of pain have been reported earlier [20].

The physical and psychiatric diagnosis are presented in table II. One hundred and forty four (72%) cases had identifiable psychiatric problems, with a predominance of neurosis. 30.5 percent were diagnosed as neurotic depression, 19 percent as anxiety states or neurosis. 13 percent as hysteria or hypochondriacal neurosis. Six patients were diagnosed as psychalgia. Only three patients had psychosis, all depressive in type. However, 56 cases (28%) had no identifiable psychiatric disorder, of

which fourteen cases could not be given either a physical or psychiatric diagnosis by the physician or psychiatrist. These cases had no identifiable organic pathology or emotional problems.

Table II - Physical and Psychiatric Diagnosis of Pain Patients. PSYCHIATRIC DIAGNOSIS

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Majority of cases diagnosed as neurotic depression were married, elderly and matriculates. All cases of psychalgia came from urban background, mainly clerical profession educated above matric and Hindu. Patients reported pain in various parts of the body irrespective of the psychiatric diagnosis.

Present State Examination

The common symptoms reported on the present state examination were worrying by 77 percent, feeling unwell physically (87%) and hypochondriacal pre-occupation (35%), besides depression (40%). 5 percent of the sample reported intense depression and 35 percent had moderate degrees of depression. Other depressive concomitants were also reported, namely loss of interest (31.5%), hopelessness (16.5%), social withdrawal (9.5%), self-depreciation (5.0%), loss of appetite and weight (18%), loss of libido (17%). 8 percent had suicidal ideas. On inquiring whether anxiety or depression is primary 24.5 percent reported anxiety to be primary and 26.5 percent reported depression to be primary. In 41 percent both anxiety and depression were present but seemed independent of each other or it was not possible to decide whether one of them was primary. Irritability was another affective disturbance noticed. 41.5 percent reported the feelings of irritability but most kept it to themselves. Percentage distribution of other common depressive symptoms are given in Tables III and IV.

Table III - Depressive Symptoms

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Table IV - Biological disturbances of depressive nature

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On examining the correlations between various prominent depressive symptoms and, age and sex (Table V) it was observed that most depressive features are highly pronounced in the elderly age group. Depression (primary) was significantly more in elderly, in contrast to predominant anxiety (primary) in younger age group ($p < .001$). Other symptoms significantly more in elderly were irritability ($P < .05$), Loss of weight ($P < .05$) and depressed mood or sadness ($P < .05$). Loss of libido and loss of interest were also more often seen in elderly but this did not achieve statistical significance.

Table V - Age and Sex Correlates of Some Prominent Depressive Features

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Discussion

It is noteworthy that almost three quarters of the patients had identifiable psychiatric illness. That neurotic or reactive depression and anxiety neurosis was the commonest psychiatric diagnosis does not come as a surprise as there are numerous studies reporting chronic pain in various associations with depression [3], [9], [12], [13], [21], [22]. The diagnosis of hysteria and hypochondriasis in chronic pain patients has also been reported. Psychosis was relatively infrequent. Endogenous depressive psychosis was reported only in 6 percent cases by Pilowsky [23] and in none by Maruta et al [22]. On the other hand, 20 percent of patients in Large's [12] series had endogenous depression.

The rate of psychosis could be low in the present study since only those patients have been included who volunteered the first or second complaint of pain. Patients with any psychosis usually give other disturbing symptoms as chief complaints. Many psychotics could be reporting or suffering from chronic pain but such cases have got excluded because of the screening procedure.

The Present State of Examination (PSE) reveals the predominance of depressive symptoms. Almost 77 percent of patients have depression alone or associated with anxiety. It is, however, less than 100 percent patients reporting depression in study by Ward et al [11] but it is more than the 56-65 percent patients with symptoms of depression reported by some studies [4], [9], [10]. However, moderate depression without anxiety is reported by 40 percent patients. It could be because the patients included in our study have chronic, continuous and intractable pain in many cases. Anxiety is also present in about 75 percent cases and makes it an important feature in presentation of chronic pain. Various manifestations of anxiety as autonomic freefloating anxiety, worrying, tension pains, nervous tension, tiredness and restlessness have been reported by 30-77 percent of the patients. Irritability is also marked, as it was found also by Pilowsky and Spence [24].

On examining the correlations between age, sex and certain depressive symptoms, interesting trends emerge (Table V). Anxiety is significantly more in the younger age group ($P < .001$) in contrast to depression being predominant in the elderly. Similarly, more elderly patients report irritability ($P < .05$), Loss of appetite and weight ($P < .05$) and depressed mood ($P < .05$). Such an observation is not reported in other studies. Likely reasons for this could be either more severe pain is reported [20] or the chronic pain being associated with physical illness in the elderly [25]. The other characteristics of pain were found to be similar in all age groups. On the contrary, depression and irritability could be responsible for increased intensity of pain, as affect can alter pain perception.

While this study reflects the predominance of depression in chronic pain patients, the occurrence of pain in depressive illness is also commonly seen [11], [26], [27], [28]. Many of these studies [11], [26], [28], [29] have found marked alleviation of both pain and depression after treatment with tricyclic anti-depressants. This is important since management of chronic pain is still a problem. There is a likelihood that chronic pain with depressive symptoms may respond favourably with anti-depressants. The relationship between major depressive disorder and somatisation is an interesting one, as pain is a common somatic symptom [30], [31]. The difficulty arises when chronic pain patients have difficulty in describing their feelings. Such patients, considered alexithymics, have poor prognosis to most therapies [32], [33], [34], [35], [36]. Moreover, there are hardly any differences between alexithymics and depressives with pain [36]. Biological disturbances are also present in about 18 percent of cases in this study. Though these are more often seen in endogenous disorders, these are quite common in neurotic illness as well. These should incline one to look for masked depression in chronic pain patients especially among elderly [31].

Conclusion

This is the first major study on chronic pain in our country, especially focusing on depression and depressive symptoms. The management of such cases pose a problem to the clinician and proper understanding of the symptom, the emotions and the disturbances caused is very essential. With the predominance of depressive symptoms in many, especially elderly, the understanding becomes clearer. The role of anti-depressants in the therapy of such cases needs to be explored in detail.

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