ALEXITHYMIA IN IRRITABLE BOWEL SYNDROME

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ABSTRACT

Thirty subjects of irritable bowel syndrome (IBS) and 30 normal controls were compared. IBS patients showed significantly higher alexithymia score, depression, neuroticism and stress scores. When alexithymia was taken as independent variable it was found to correlate positively with depression and neuroticism. No correlation between stress score and alexithymia was found.

Key Words: Irritable bowel syndrome, alexithymia, stressful life events, depression, neuroticism

Irritable bowel syndrome (IBS) is a psychosomatic disorder. Three main factors are implicated in its etiology viz. emotional factors, organic and dietary fibre deficiency. How IBS is related to expressions of emotions is not yet clearly known. Alexithymia is a personality trait, literally means no words to describe emotions. Alexithymia is difficulty in identifying and describing feelings and distinguishing between feelings and physical sensation (Sifneos, 1972). Persons who manifest alexithymia often have constricted imaginative capacities. When distressed, the patients are simply aware of not feeling well and usually complain of somatic symptoms. If we know about an IBS patient's alexithymic status it can help us in deciding about modality of behaviour treatment or how to focus counselling.

Studies reporting association between alexithymia and IBS, have found high prevalence of alexithymia in IBS patients (Freyberger, 1982) and also that IBS patients are less alexithymic than organic gastrointestinal group but more than normal (Injener et al., 1985; Heerlein et al., 1984). There has not been any specific personality type reported to develop IBS.

On measures of personality, IBS patients resemble psychosomatic patients. It has been reported that IBS patients are between normal subjects and neurotic outpatients with respect to measures of neuroticism (Palmer et al., 1974; Latimer, 1983). Rajgopalan et al. (1996) reported IBS patients to be significantly more neurotic than controls.

Haviland et al. (1988) reported that alexithymia was a defensive response to a depressed mood, while Blanchard et al. (1981) found that alexithymia is independent of depression.

Relationship of stressful life events and alexithymia has been explained by stress alexithymia hypothesis (Martin & Pihl, 1985), according to which in the presence of life events alexithymic characteristics will prevent an individual from coping effectively with the stressor. The ineffective coping is due to a lack of afferent awareness which would permit identification of a particular event as stressful and a tendency to use actions as a primary generalized behavioural response. The ineffective coping would serve to prolong an individual's exposure to a stressor. This prolonged exposure would aggravate the somatovisceral response. Moreover, the inability to identify events as stressful events, which would serve to also intensify the
This study was undertaken: (I) to find out the association of alexithymic trait with neuroticism, depression and presumptive stressful life events in irritable bowel syndrome patients and (II) to compare the IBS group with normals with regards to alexithymia, depression, presumptive stressful life events, and neuroticism.

MATERIAL & METHOD

Sample comprised of 30 consecutively selected subjects attending the gastroenterology OPD of SMS Medical College and Hospital, Jaipur, diagnosed as having irritable bowel syndrome by the consultant gastroenterologist.

The diagnosis of IBS was confirmed on each patients with the aid of investigations which included complete haemogram, blood chemistry including electrolytes, renal and hepatic function tests, sugar profile, urine sediments, stool for ova and cyst and endoscopic examination assisted by ultrasonography.

Similarly 30 subjects preferably relatives of patients matched on age, sex, economic status and occupation formed the control group.

The inclusion criteria for admission in the control group ensured the absence of psychiatric illness or any other major physical illness in past one year.

Both the groups were subjected to Toronto alexithymia or TAS scale (Taylor et al., 1985), Beck depression inventory (Beck et al., 1961) (hindi version), presumptive stressful life events scale (Singh & Kaur, 1984), PEN inventory (Menon & Verma, 1988).

TAS is a 43 item likert type scale with question pertaining to four areas viz. difficulty in identifying and distinguishing between feelings and bodily sensations, difficulty communicating feelings, reduced day dreaming and externally oriented thinking. Scores ranged from 1-5 on responses from strongly agree to strongly disagree. No cut off score has been given. TAS has been used on Indian population and was found to have adequate internal consistency and reliability (Sriram T.G. et al., 1987).

30 patients of IBS and 30 control subjects were pooled together and divided into 3 groups as per their score on TAS as high, low and middle alexithymia, to find out whether IBS and normal are equally distributed in 3 groups or not. To find out association of alexithymic scores with stress score, neuroticism and depression, ANOVA was used.

RESULTS

Majority (69%) of the patients were in the age group 21-40 years; 70% were males; 80% were having family income above Rs.2,000/- per month; 36% were government servants.

| TABLE 1 | DISTRIBUTION OF PATIENTS BASED ON ALEXITHYMIA SCORES |
|--------|------------------------------------------------------|
| Groups | Low: ≤109 | Middle: 110-126 | High: ≥127 |
| IBS (N=30) | 2 | 15 | 13 |
| Control (N=30) | 15 | 13 | 2 |

| TABLE 2 | COMPARISON OF PSYCHOSOCIAL VARIABLES IN PATIENTS AND CONTROLS |
|---------|------------------------------------------------------------|
|         | IBS (N=30) | Control (N=30) |
| Alexithymia | 125.96 (11.5) | 108.96 (13.29) |
| t=20.04, p<.01 |
| BDI score | 14.16 (10.03) | 3.56 (3.71) |
| t=5.43, p<.01 |
| Neuroticism | 8.56 (4.39) | 4.26 (3.08) |
| t=4.39, p<.01 |
| Stress score | 234.33 (169.51) | 98.83 (56.21) |
| t=4.0, p<.01 |

SD values are given in parenthesis.
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### TABLE 3
**DISTRIBUTION OF MEAN SCORES AMONGST LOWER/MIDDLE/UPPER ALEXITHYMICS**

| Test variables | Lower | Middle | Upper | F ratio |
|----------------|-------|--------|-------|---------|
| Stress scores  | 119.94| 179.32 | 195.67| 1.31    |
|                | (107.49)| (139.44)| (183.59)|         |
| Neuroticism    | 3.65  | 6.69   | 8.67  | 6.52*   |
|                | (2.52)| (4.36) | (4.75)|         |
| Depression     | 2.65  | 9.36   | 15.00 | 9.00*   |
|                | (2.50)| (9.11) | (10.53)|         |

SD values are given in parenthesis.

*\( p < .01 \)

20% housewives, 16% professionals, and 13% were students, majority (93.3%) were educated upto secondary level and above; 70% were married, 80% from urban background and 60% were from joint family. There were no statistically significant differences between IBS and the control group on any of the sociodemographic variables.

On dividing all the subjects on the basis of alexithymia it was observed that more IBS patients were high alexithymics and subjects from control group were low alexithymics. The middle alexithymics were equally from IBS and control group (table 1). Table II shows comparison of psychosocial variables in patients and controls, differences on all the variables are highly significant.

To find out association of alexithymia with stress score, depression and neuroticism ANOVA was used (table III). Results suggest that on stress score the difference among the three groups was not significant. Neuroticism score was significantly high in those who had high alexithymia scores as compared to those who had low alexithymia. Almost similar pattern was observed for depression. Middle alexithymia group did not differ with high alexithymia group. Depression score was significantly less in low alexithymics and significantly more in high alexithymics.

### DISCUSSION

Patients with irritable bowel syndrome have been reported to be young adults, urban sedentary workers (Pimparker, 1971; Fielding, 1977; Sharma & Chawla, 1982; Rajgopalan et al., 1996). Our findings are consistent with these findings. Studies from west report IBS to be two to four times more common in women (Hislop, 1971; Young et al., 1976; Fielding, 1977). Conversely, Pimparker (1971) reported IBS to be three times more common in males in India. In the present study too 70% of patients were males. Reversed sex ratio may reflect health care seeking behaviour and sociological factors rather than true difference between the illness pattern in males and females.

Life events responsible for onset or exacerbation of IBS were reported in 50%-90% of cases (Chaudhary & Truelove, 1962; Pimparker, 1971; Svedlund, 1983; Craig & Brown; 1984). However, Singh et al. (1991) could document stressful life events is only 20% of cases. In present study IBS group had significantly high stress score as compared to control group (table 2).

Neuroticism scores on PEN inventory were significantly higher in IBS group and correlated with alexithymia scores. High scores on neuroticism scale are characterized by mood swings, lack of concentration, worries, psychosomatic symptoms, nervousness, sensitivity and inferiority feeling (Eysenck & Eysenck, 1976). Similar findings have been reported by Nakagawa et al. (1979) and Rajgopalan et al. (1996).

In the present study, IBS group showed significantly more alexithymic features than control group. Sifneos (1972) argued that the presence of high alexithymic characteristics lead to prolonged exposure to stress. Since no difference between high, middle and low alexithymics was found on stress score the stress alexithymia hypothesis given by Martin & Pihl (1985) was refuted in present study.

In a study Nicholas et al. (1990) found that IBS patients had increased levels of
depression and pessimism, were more self-centred and tended to use denial in coping with stress, as reflected by high MMPI scores on depression and hysteria scale. Bergeron and Monto (1985) found 4 subgroups on administering MMPI: inadequate dependency, somatization of affect, reactive depression and anger & denial. In this study, IBS patients were scoring high on depression and depression scores correlated with alexithymia. This finding suggests that alexithymia may be a defensive response to depressed mood as reported by Haviland et al. (1988). Another interpretation of this finding may be that alexithymia may be dependent on state rather than a personality trait. While observing psychosomatic patients from the standpoint of alexithymia, Nakagawa et al. (1978) identified 2 major types of patients, those who present typical alexithymic characteristics and those in whom neurotic features are more prominent. Because of cross sectional design of study it can not be determined whether alexithymia is a predisposing personality trait or a consequence of disorder as in majority of patients duration of illness was more than 2 years. Traditional dynamically oriented psychotherapy is unsuccessful treatment modality for these patients. More accurate identification of patients who are alexithymic may lead to modified treatment plans.

Summarising the results it can be said that in the present study the individuals who were high alexithymics also had neurotic personality disposition hence they were not true alexithymics and they used alexithymia as a defensive response to depressed mood as shown by higher depressive scores in high alexithymics.

However, there is a need to carry out similar study on a large sample with some more parameters to evaluate the status of alexithymia as such.

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