

## PSYCHIATRIC FACTORS IN ULCERATIVE COLITIS

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### SUMMARY

Controlled study on 20 patients of ulcerative colitis was conducted at Gastroenterology Department of Civil Hospital, Ahmedabad. It has been observed that in three fourth of the cases, age of onset is before 40 years; & male, female ratio 4 : 1. No significant trend emerged in marital status, type of family, birth order, dietary habit and parental profile. The disease is common in lower socio-economic status. Ulcerative colitis patients are particularly exposed to stressful life situations and more prone to develop illness.

The importance of Psychological factors in the causation of ulcerative colitis has been emphasised by several workers (Alexander 1950, Szasz 1951). In spite of the widely held clinical opinion that emotional factors are of great importance in both ulcerative colitis and functional disturbance of the colon, few studies have been made of the effect of emotion on colonic behaviour. Chaudhury and Truelove (1961) in their study of human colonic motility showed that some subjects had definite colonic hyperactivity in relation to certain topics.

The purpose of this study is not to prove or disprove any etiological hypothesis but rather to take advantage of well controlled data in such a way as to cast light on the frequency with which documentable aspects of demographic, socio-economic and psychologically stressful experience occur among patients of ulcerative colitis.

### MATERIAL AND METHOD

Selection of sample—There were two group; Group 'A' consisted of 20 cases of ulcerative colitis and Group 'B' comprised

of 20 cases of Koch's abdomen matched more or less equally in respect of age, sex, educational and socio-economic status used as control. In both the groups, cases were selected from patients attending Gastroenterology clinic as outpatient for a follow up or were admitted in civil hospital, Ahmedabad for investigations and treatment. All cases were investigated individually and diagnosis was confirmed by Gastroenterologist.

Initial rapport with the patient was established and a detailed information was gathered from each patient and recorded on a proforma of structured questionnaire.

### RESULTS

Table 1 describes the characteristics of the two studied groups in terms of Age, sex, marital status, education, socio economic status, type of family, birth order and dietary habit. The two groups were not significantly different on any of the above variables.

Only 2 in Group-A gave family history of ulcerative colitis and 1 of mental illness. Thus ulcerative colitis is not seen to be

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TABLE 1

	Group-A (N=20)	Group-B (N=20)
<i>Age (in yrs.)</i>		
11-20	5	4
21-30	4	4
31-40	4	4
41-50	6	5
Above 50	1	3
Mean :	32.5	24.5
S. D. :	7.8	13.6
<i>Sex</i>		
Male	16	14
Female	4	6
$X^2=0.52$ , d. f. = 1, N. S.		
<i>Marital Status</i>		
Single	6	5
Married	14	14
Widowed	0	1
Divorced	0	0
$X^2=1.08$ , d. f. = 2, N. S.		
<i>Education</i>		
Illiterate	3	3
Secondary Education	14	14
Higher Education	3	3
$X^2=0.12$ , d. f. = 2, N. S.		
<i>Socio-economic status (S. D. Kapur's Scale)</i>		
I	1	1
II	3	4
III	5	4
IV	11	10
V	0	1
$X^2=0.22$ , d. f. = 2, N. S.		
<i>Type of Family</i>		
Joint	10	12
Nuclear	10	8
$X^2=0.07$ , d. f. = 1, N. S.		
<i>Birth Order</i>		
Eldest	9	3
Youngest	3	7
In between	8	10
$X^2=4.82$ , d. f. = 2, N. S.		
<i>Dietary Habit</i>		
Vegetarian	15	16
Non-vegetarian	5	4
$X^2=0.42$ , d. f. = 1, N. S.		

TABLE 2. *Family history*

Disease	Present	In whom	Absent
Ulcerative colitis	2(10%)	Father	18(90%)
Mental Illness	1(5%)	Mother	19(95%)

significantly associated with family history of either ulcerative colitis or mental illness.

TABLE 3. *Patients' impression of parents*

Type of parent	Father		Mother	
	Group A	Group B	Group A	Group B
1. Over indulgent & over protective	0	0	1	0
2. Affectionate	12	17	17	19
3. Cold & Indifferent	3	0	0	0
4. Domineering & Harsh	1	0	1	0
5. Don't know	4	3	1	1

No consistent parental profile.

Table 4 describes the age of onset. Majority of ulcerative colitis patients had the onset before the fourth decade.

TABLE 4. *Age of onset*

Age group (in yrs.)	Group-A	Group-B
0-10	1(5%)	0
11-20	4(20%)	4(20%)
21-30	4(30%)	4(20%)
31-40	4(20%)	5(25%)
41-50	5(25%)	6(30%)
Above 50	0	1(5%)

TABLE 5. *Separation from parents*

Separation	Group-A	Group-B
Maternal	0	0
Paternal	1	4
Both	10	9
No Separation	9	7

$X^2=2.08$ , d. f. = 3, N. S.

TABLE 6. *Precipitatory Factors*

	Present	Percentage	Absent	Percentage
Group-A	15	37.5	5	12.5
Group-B	2	5.0	18	45.0

$X^2=17.28$ , d. f. = 1,  $p < .001$ .

This table shows that there is relation between precipitatory factors and ulcerative colitis.

TABLE 7. *Life Stresses*

Father died before 16 years	7
Mother died before 16 years	2
Subject's education & Job inconsistent	1
Subject's spouse education inconsistent	0
Subjects married more than once	1
Three or more different jobs	2
Three or more different residents (In different towns & cities)	2
Subjects lived alone for 5 years or more	3

Score (On Paykel's methodology)

	Group-A	Group-B
Low (0-1)	13(65%)	20(100%)
Medium (2-3)	6(30%)	0
High (4 or more)	1(5%)	0

From clinical experience and also from the table, life stress affects Group-A

rather than Group-B. As the sample is small, we can't apply statistical test as the frequency in other cells being 0.

#### DISCUSSION

Twenty confirmed cases of ulcerative colitis were studied in comparison to same number of Koch's abdomen drawn from the same community to evaluate the psychosomatic aspects of the disease. Both the groups were more or less equally matched in terms of age, sex, educational background and socio-economic status.

Male/female ratio in this series is 4 : 1, which is not typical of the incidence reported by Western authors (Bargen, 1943). This difference in sex ratio may be because traditionally men consult doctors more frequently than women. Secondly in our country male who is usually the wage earner may be under more stress.

Eighty percent of ulcerative colitis patients were from low socio-economic group which is in contrast to common belief that this disease is more common in higher socio-economic group. In a developing country like ours, lower socio-economic group is more under stress and as such more vulnerable to disease. In this study seventy five percent cases had onset of disease before the fourth decade when the vulnerability to emotional strains of life is greater and supports the view of Engel (1955), Chaudhury and Truelove (1961).

Majority of patients in both the groups had good and affectionate parental relationship. In general, the mothers are described as controlling and dominating (Daniel, 1944). However, in this study one out of twenty ulcerative colitis patients described his mother as dominating and harsh. The women are more likely to think of their mothers as cold, unaffectionate or indifferent but none in this series opined as such. Only one patient described his mother as overprotective and

rest have described their mothers as affectionate irrespective of male or female patient. It is necessary to emphasize that the bulk of information came from the patients. It is difficult to determine whether the consistency in the descriptions of mother and mother-patient relationship is a reflection of the common psychology of ulcerative colitis patients or whether it truly indicates a close similarity of these mothers. We are inclined to believe that both factors play a role.

The onset and exacerbation of ulcerative colitis is related to trauma of separation from key figure (Fullerton, 1962). However, in this series, separation from parents is present in only 50% cases.

Stressful psychosocial conditions have been observed as potential etiologic agents in the development of illness (Gersten and Langner 1976). In this series, in 15 cases well defined events proceeded as follows :

- (a) Physical illness in 3 cases.
- (b) Demands for performance which the patient felt incapable of fulfilling in 3.
- (c) Severe financial pressure in 3 cases.
- (d) Loss of job and death of close friend or relative in 2 cases each.
- (e) There was abrupt onset of bleeding rectum in a girl soon after menarche.
- (f) One student had first onset of the disease just before appearing for matriculation examination.
- (g) One following migration to another state.
- (h) One due to fear of taking forward step in marriage.
- (i) One reported that he always noticed the attack of ulcerative colitis following travelling.

The cases in the literature follow closely the same pattern. The cases of Jackson and Yalom (1966) began after separation. Green's (1947) cases could not cope with sudden love loss and a painful

humiliation.

Life dissatisfactions are indeed stress inducing. The stresses induced by life dissatisfactions are directly or indirectly linked to physical illness (Gersten *et al.*, 1976). Subjects in the present study did not report a large number of life events, which is similar to Goldberg and Comstocks (1976) findings. No instances of extreme separation anxiety was found and in only 6 was there a moderate to severe degree of life stress present before the onset of first attack.

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