PERSONALITY AND CLINICAL MANIFESTATIONS OF TENSION HEADACHE

K. RANGASWAMI, M.A., D.M. & S.P.

SUMMARY

The personality dimensions and clinical manifestations of tension headache were studied and compared with neurotics and normals. The results showed that the experimental group differed significantly from normals. Persons with tension headache were introverted and scored highly on neuroticism. They did not differ from neurotics in personality and clinical manifestations except in relation to hysterical and obsessive features.

Tension headache, usually an intermittent disorder, is one of the ubiquitous problems in clinical practice. In true sense, headache is not a disease but often an extremely complex symptom and a presentation of diverse and varied diseases. Various researchers have explored the possible explanation as to understand the nature of headache on the basis of biological, psychological and social determinants, but without a simple cause-and-effect relationship in headache. However, it was revealed that emotional factors are often the most important precipitants of headache. Chakraborthy and Mallick (1966) and Alan De Souza (1974) observed that among students, stress of studies might be precipitating factor in headache. Children and adolescents with average or low average intelligence frequently complain of headache, because of their inability to cope up strain and strain these children, moreover, presented problems of adaptation and score significantly less on intelligence tests (Prince, 1960 and Rangaswami, 1980). Rangaswami (1981) reported contrasting results that some adolescents with above average intelligence manifested with headache and they were highly ambitious, home-bound, of serious nature,introverted with adjustment problems, and over-concerned with their rank in the class.

In recent times rapidly changing socio-cultural trends have largely contributed for the development of headache. Chakraborthy and Mallick (1966) reported that disturbed family relationships, frequent frictions and quarrels financial and occupational stresses, traumatic events were the precipitants in tension headache. Their personality make-up demonstrated traits of obsessive, nature, were of shut-in type domineering, aggressive, anxious and hysterical. Some of them were found to have inadequate, immature and traits of dependency. Gittleson (1951) has reported that persons with headache manifested with obsessional personality, Wig (1964) revealed that patients with tension headache had latent or manifest anxiety, hysteria and depression.

Depending upon the vulnerability of the individuals, they respond differentially to stressful situation with increased activation in a particular muscle or a group of muscles. Balshan (1962) found in his experiments where both anxious and non-anxious subjects showed increased sympathetic arousal during auditory stimulation but less anxious individuals exhibited very little increase in the skeletal muscle tension. However, Malmo and Smith (1955) concluded that the more anxious persons displayed greater tension in forehead muscles.

Till now, it has been extremely difficult to define the mechanism by which pain is produced as highlighted by Mage and

---

1 Presented at the 34th Annual Conference of Indian Psychiatric Society, Madras, Jan. 1982.
2 Clinical Psychologist, Institute of Mental Health, Madras-600 010.
Clinical Manifestations of Tension Headache

Saper (1981). However, sustained muscle contraction, vaso-constriction within the contracted muscles and accumulation of pain producing substances are some of the possible mechanisms. They, further, explored the possible emotional factors like repressed hostility, unresolved dependency needs and psychosexual ambivalence playing a major role in the production of tension headache. Various studies have demonstrated the association between the type of personality and tension headache, nevertheless this aspect needs further substantiation and therefore, this study aims to investigate the personality variables and clinical manifestations of tension headaches persons.

Methodology

The sample of the present study comprised of 20 cases of tension headache fulfilling the following inclusion and exclusion criteria:

Inclusion Criteria:

1. These cases fulfil the following diagnostic criteria of Dalessio (1981) for tension headache.
   - dull binding headache,
   - tightness, heaviness,
   - cramp-like or nagging pain originating unilaterally or bilaterally or globally lasting for hours to months or years.
2. Age—15-40 years.

Exclusion Criteria:

1. Patients of tension headache secondarily to physical diseases like migraine, toxic drugs, nasal, ocular, dental and sinusal diseases, cranial inflammations, etc. These diseases were ruled out on clinical basis.
2. Primary diagnoses of neurotic illnesses.

These 20 cases of tension headache of which duration ranged from 6 months to 10 years of moderate to severe intensity were interviewed to elicit details about the headache and each of them was administered Eysenck Personality Inventory (Eysenck and Eysenck, 1964) and Middlesex Hospital Questionnaire (Crown and Crisp, 1966). This experimental group was compared with equal number of neurotics and normals who were also administered the same tools. The sample was matched for age, sex and social status. The neurotic group consisted of cases diagnosed as neuroses according to ICD IX criteria. No sub-classification of neurotic illnesses was taken into consideration. The normal sample was drawn from the general population.

Results and Discussion

The present communication revealed that tension headache and neurotic groups differ significantly from normals. The Table shows that the experimental group presented with introverted personality and have high neuroticism as observed on E.P.I. scores. In relation to the presentation of symptom constellation it was observed that experimental group differed from normals and manifested free-floating anxiety, phobia, obsessive-compulsions, somatic preoccupations, and depression as evidenced by the M.H.Q. scores. There was no differentiation between tension headache and neurotic group as far as their personality dimensions and clinical variables were concerned but the two groups differed on obsessive-compulsion and hysterical scales. The tension headache group scores significantly higher than the normal group on obsessive-compulsion scale. On hysteria scale neurotics score significantly more than the experimental group. However, the tension headache group revealed high neurotic features on MHQ subscales and also on total score. The experimental group and neurotic differ from normals on all the scales of MHQ except hysterical features. The neurotic
TABLE 1 MEAN, S. D., and t-value of the three groups on EPI and MHQ.

| Scales        | 1 Tension Headache Mean±S.D. | 2 Neurosis Mean±S.D. | 3 Normal Mean±S.D. | t value between 1 and 2 | t value between 2 and 3 | t value between 1 and 3 |
|---------------|-------------------------------|----------------------|-------------------|------------------------|------------------------|------------------------|
| EPI Scale     |                               |                      |                   |                        |                        |                        |
| F             | 6.2±3.0                       | 6.8±3.5              | 8.2±4.4           | 0.98                   | 1.64                   | 1.70                   |
| N             | 16.3±4.9                      | 14.1±4.2             | 7.9±2.4           | 2.24*                  | 6.36**                 | 7.69**                 |
| L             | 3.3±1.2                       | 2.8±2.8              | 2.6±1.4           | 1.16                   | .61                    | 4.41**                 |
| MHQ. Scale    |                               |                      |                   |                        |                        |                        |
| FFA           | 9.6±3.5                       | 8.2±3.4              | 4.1±2.0           | 1.51                   | 4.87**                 | 5.96**                 |
| PHO           | 6.1±2.4                       | 5.7±2.3              | 2.6±1.5           | 0.51                   | 3.29**                 | 5.63**                 |
| OBS           | 8.2±3.3                       | 6.9±3.8              | 6.0±3.2           | 1.05                   | 0.85                   | 2.08*                  |
| SOM           | 6.8±2.7                       | 6.7±3.6              | 2.8±2.0           | 0.10                   | 4.16**                 | 5.33**                 |
| DEP           | 5.9±1.3                       | 5.0±2.6              | 3.2±2.0           | .82                    | 2.81*                  | 4.95**                 |
| HYS           | 3.5±1.8                       | 6.0±2.8              | 4.0±2.2           | 3.54**                 | 2.40*                  | 0.94                   |
| Total         | 40.3±11.1                     | 39.1±9.4             | 22.9±6.2          | 0.46                   | 6.43**                 | 6.05**                 |

*Significant **Highly Significant.

group also differs significantly from normals on all the clinical scales except on obsessive-compulsion.

The results of the present communication are comparable partially with that of Wig (1964) who revealed that in addition to anxiety and depression, cases with tension headache, also manifested hysterical features. These clinical manifestations of tension headache persons are in consonant with the findings of present study. The tension headache group and neurotic have more or less similar personality dimensions and clinical presentations. This implies that the cases with tension headache have a large number of neurotic features and present a clinical profile similar to neuroses. This study further revealed that tension headache group has high emotional disturbance, low frustration tolerance and adjustment difficulties. This is compatible with views put forward by Frazier (1980). Moreover, this group showed anxiety features, apprehension, proneness for excitement, obsessions and introverted personality make up which is comparable with the findings of Chakraborthy and Mallick (1966) and Gitleson (1961).

It is concluded that persons with tension headache showed introverted productivities and have marked neuroticism. Clinical profiles of these cases demonstrated the symptoms of anxiety, somatic preoccupations, obsessive-compulsions and depressive features.

REFERENCES

Allen De Souza (1974). Causes of behaviour problem in children. Child Psychiatry Quarterly, 1, 7, 5.

Balshain, I. D. (1962). Muscle tension and personality in women. Arch. Gen. Psychiat., 7, 436.

Chakraborthy, A. and Mallick, S. A. (1966). Headache—A cross cultural study. Ind. J. Psychiat., 8, 101.

Crown, S. and Cane, A. R. (1966). A short clinical diagnostic self rating scale for psychoneurotics. Brit. J. Psychiat., 112, 917.

Dalal, D. J. (1980). Wolff's headache and other headpain. Oxford : Oxford University Press.

Eysenck, H. J. and Eysenck, S. B. G. (1964). Manual of the Eysenck Personality Inventory. London : University of London Press.
Frazier, S. H. (1980). Headache. In Comprehensive text book of Psychiatry. (Eds.) H. I. Kaplan, A. M., Freedman & R. J. Sadock, Third Edition. Baltimore, London: Williams & Wilkins.

Gittleson, N. L. (1961). Psychiatric Headache—A clinical study. J. Mental Science, 107, 403.

Magee, K. R. and Saper, J. R. (1981). Clinical and basic neurology for health professionals. Chicago: Year Book Medical Publishers Inc.

Mamo, R. B. and Smith, A. A. (1961). Forehead tension and motor irregularities in psychotic patients under stress. J. Personality, 23, 391.

Prince, R. (1960). The “Brain Fag” syndrome in Nigerian students. J. Mental Science, 106, 539.

Rangaswami, K. (1980). Study difficulties and headache in adolescents. Paper read at Southern Regional Conference of Indian Psychiatric Society held in JIPMER, Pondicherry.

Rangaswami, K. (1981). Tension headache in adolescents. Indian Journal of Applied Psychology. (In Press).

Wig, N. N. (1964). Psychogenic headache—An analysis of 32 cases. Ind. J. Psychiat., 6, 18.