## **Review Article**

# **Psychological implications in ENT diseases**

V. P. Sood · Ajay Jain

We are sometimes faced with psychic derangement or overlay in some of the ENT diseases and the link between patient's psyche and any ENT disease at times becomes significant and troublesome. The conditions in the field between otorhinolaryngology and psychiatry can be classified as psychiatric symptoms resulting from ENT diseases or interventions and those expressing themselves as ENT symptoms due to mental ailment. The former include hearing impairment, dizziness, tinnitus, choked airway, bad oral breath, stuffy nose, traumatic interventions and external nasal deformities. The later include exaggerated and diminished pharyngeal reflex, globus hystericus, speech disorders, vasomotor rhinitis, nose picking, choked feeling, dizziness and headache. At times diseases originate in the human mind (consciousness), causing negative thoughts like jealousy, anger, and depression due to frustration.

A healthy mind in a healthy body generates sound and noble thoughts. Once a healthy body—mind relationship is established, we can be reasonably sure that greater happiness and success is within our reach. Patient seeking help from ENT surgeons to change their physical appearances and or function may not understand that the ultimate goal of surgery is to bring about psychological change by modifying the physical change, which is important aspect in septorhinoplastic surgery. At times patients asking for corrective rhinoplasty for minor external nasal deformities may have underlying psychological disturbance and use even slight

external nasal deformity as scapegoat for psychological upset. Males are more difficult patients psychologically for any facial cosmetic surgery. These days some patients read about their diseases or treatment on the Internet and get more confused and psychologically disturbed due to rare causes of their illness, rare complications and diversity of treatment available.

**Keywords** Psychological disorders · Rhinoplasty · Otorhinolaryngology · Placebo

#### Introduction

The link between ENT disorders and a patient's psychology is increasing rapidly due to more awareness of diseases. The patients look for the information on the disease on the Internet and become apprehensive, confused and mentally disturbed unnecessarily. We see sometimes patients who are over concerned about minimal symptoms like postnasal discharge, occasional stuffiness of nose or the feeling of lump inside throat perceiving as concern of growth. It is better to understand the psyche of the patient early in management and then apply various tactics along with due medical or surgical treatment. Some of the ENT patients may have cancer phobia and reassuring them will help mitigate the insignificant psychosomatic symptoms they are suffering.

There are several ENT conditions with strong psychological association such as cosmetic deformities of the face and particularly that of the nose and their correction, hearing impairment, chronic pain, vertigo, tinnitus, globus hystericus, hoarseness, choked feeling in the throat and headache.

Strictly speaking, every illness in otorhinolaryngology should be seen with suspicion of having a psychological overlay, since in virtually every ENT disease, the patient's psychology plays a significant part. These may be classified

V. P. Sood (⊠) • A. Jain Department of ENT, Metro Hospital Noida and Delhi

E-mail: vpsood@drsoodnasalfoundation.com, drvpsood@gmail.com



into two groups; psychiatric conditions resulting from ENT diseases or interventions and those expressing themselves as ENT symptoms.

## Psychological implications of external nasal deformities

Individuals with external nasal deformities may have emotional disturbances, which are not connected with the deformed nose, and thus psychological assessment is of utmost importance in the evaluation of a case for rhinoplasty. Minor external nasal deformities and illusion of non-existing nasal deformities especially in young males is used as scapegoat for underlying mental disturbance.

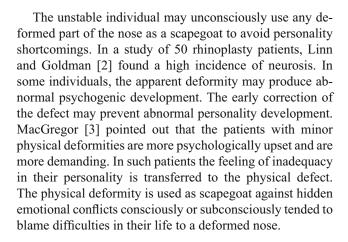
The surgeon should assess and evaluate psychological, sociocultural perspectives along with the physical manifestations. The general appearance of the patient and the way of talking helps in judging the psychology of the patient. Wrinkled and unmatched clothing, unkempt hair and ugly looking shoes are the indications of disorganized sense of reality and psychological imbalance.

Many patients, both men and women, seeking cosmetic surgery of the nose are dissatisfied with various parameters of nose. It is understandable that the nose, being the central part of the face, is very important in the presentation of its owner to the outer world [1].

Even the most experienced surgeons will at times find it difficult to select the patient for rhinoplasty when the underlying psychological or psychiatric factors are associated with minimum external nasal deformity especially in males. It is very essential to determine whether the patient has a realistic approach for the operation of rhinoplasty. Only the realistic and a well-motivated patient will have rational thinking about the outcome of surgery. The surgeons should be able to distinguish at least between the following two categories of the patients.

- a. When mental worry is due to the external deformity of the nose or the patient has realistic approach about his or her external nasal deformity. The patients in this category believe that their progress in life is hindered by their nasal deformity. They feel inferior, shy and develop anxiety and complex. They avoid social functions, as they think that they are unattractive.
- b. When inadequate personality is blamed for the physical deformity of the nose and patient wants to use nasal deformity as a scapegoat for feelings of inadequacy. A minor nasal deformity may be magnified unduly or a non-existing deformity may be prevailing. The psychosis is erroneously blamed for a minor or an insignificant external nasal deformity.

Sometimes, the surgical change in the appearance of the nose may prove to be of psychotherapeutic effect. The improvement in nasal appearance after rhinoplasty may produce contentment, self-satisfaction and self-confidence.



## Psychological implications of deafness

Hard of hearing is usually accompanied by feeling like isolation, mistrust, paranoid conditions and depression, which are most, pronounced in deaf people [4]. Deaf persons are considered as mentally insane and intellectually inferior.

Children with hearing impairment follow many different developmental pathways. The assessment of psychiatric disorders in hearing-impaired children sets some methodological problems. The immature language exhibited by many hearing-impaired children and by the difficulties that may be encountered in establishing rapport if the child does not understand the examiner's verbal exchanges hampers accurate evaluation. These difficulties may explain that the prevalence rates of mental disorders in hearingimpaired children and adolescents found in the literature vary from 15% to 60%. Most of the studies conclude that the prevalence of affective disorders in hearing-impaired children and adolescents is comparable with estimates of prevalence for hearing young people. A number of studies have suggested that deaf children show greater degrees of impulsivity than hearing children. However, it seems that this background of greater impulsivity does not lead to higher rates of attention-deficit/hyperactivity disorder (ADHD) among deaf children. Psychotic disorders are no more common among hearing impaired young people than among young people with normal hearing. If varying incidences of emotional disturbances and behavioral problems have been reported for hearing-impaired children and adolescents, except autism, it seems that children with hearing impairment experience the same range of mental health problems as hearing children. Numerous investigations have shown that deaf children of deaf parents attain better emotional and cognitive development than do deaf children of hearing parents [5].

## Psychological element in vertigo patients

The vertigo often originates in the labyrinth and it generally causes fear and feelings of imbalance and person starts



loosing self-confidence. Vertigo sometimes shakes the confidence of even the strongest person. Most of you will agree that sometimes the psychological element greatly overlap in a vertigo patient. Psychiatric disorders are usually considered only after all medical causes of dizziness have been ruled out. A true vertigo patient will give a definite history like history of head trauma, in BPPV or history of vomiting in centrally originated vertigo. The psychoneurotic patient will narrate many other confounding symptoms like headache, heaviness of head, forgetfulness, feeling dull, pessimism etc. Assessment of psychiatric and autonomic symptoms should accompany, not follow, otologic evaluation of dizziness. These symptoms may be more important diagnostically than dizziness quality [6]. It's important to identify such patients and seek a psychiatric referral at earliest while treating true vertigo patients with full enthusiasm taking them into confidence early.

Choked airways Especially laryngeal obstructions cause fear and restless. A stuffy nose is generally assumed to hamper intellectual functions (Eckert-Mobius, 1975) and to influence the patients temper presumably mainly by impairing normal sleep and secondly by slight anoxia.

Lobus hystericus A feeling of lump in the throat is a complaint for which patient frequently consult ENT practitioner. Unfortunately, this is often associated primarily with psychical abnormalities and females are somehow more prone for this. Before labeling them as globus, it is imperative to rule out organic causes. Most of them will be treated for gastroesophageal reflux disease (GERD) ultimately. Most of them must have consulted numerous ENT doctors without significant benefit. Reassurance works wonders in these patients.

Vasomotor rhinitis This is commonly considered as a disease strongly influenced by psychical mechanisms as a result of excessive mental involvement. In this condition there is imbalance of sympathetic and parasympathetic nervous system.

Tinnitus Buzzing or ringing sounds perceived by the patient in one or both ears causes lot of anxiety and emotional disturbances to the patient and sometimes disturbs even sleep. These patients should be investigated properly to rule out any neurotological cause especially for unilateral Tinnitus. Most of the time, no cause is found and it is termed as idiopathic, then these patients should be reassured lest their psychology is unduly disturbed further.

Headache This symptom has many causes including various ENT diseases. It is commonly known that patient's psychology and mental factors play an important part in its genesis and progress and migrainous headache is classical example. Headache is considered as non-specific syndrome illustrating the concept of pain as an emotion. Viewed in this way, its meaning looms larger than its site.

Pain indicates disease of the patient, sometimes with his body, but more often with his life. No pain is "imaginary", nor can some to psychological pathways. Such a decision is often merely a judgmental one.

Just as the "brain" cannot easily be separated from the "mind", so to believe that some pain is "physical" and some "emotional" is a distortion. All painful syndromes are mixed and the problem is to decipher the meaning of the pain. Only rarely will headache respond to physical measures alone [7].

Dysphonia It is estimated that 3–9% of adults and 20% of professional voice users have a dysphonia [8], which is due to inefficient vocal function without pathology [9, 10] in approximately 60% of instances [11]. Described as prototype for functional disorders [12] or medically unexplained symptoms, dysphonia is subject to and indicative of psychological status [13]. Higher neuroticism, distress, psychiatric disturbance [14] and medically unexplained symptoms scores have been demonstrated in patients with dysphonia [13,10]. Personality [15], emotional well-being and psychological status [16] are cited as contributors to dysphonia [15] in addition to physical factors such as voice misuse [9], smoking and gastric reflux [17]. Other findings have shown that dysphonic patients have no excess psychological disorder or previous medically unexplained symptoms when compared to general ENT outpatients [18, 19].

## Hypochondriasis in ENT practice

Females are involved in a ratio of 9:1, with the majority working in medically related professions. Depression and anorexia are typical symptoms. When a factitious disease is suspected, psychiatric consultation is essential. Confrontation of a suspect patient by the otolaryngologist is not often considered because several reports quote suicidal behavior in up to 25% of self-manipulating patients and tendencies to refuse to follow psychiatric treatment are considerable [20].

## Placebo surgery in otolaryngology

Placebo medicines have a well-known role and routinely prescribed in alleviating ENT diseases just emphasizing again greater psychological element in ENT practice. But can we say the same thing about surgeries? The classic example in otolaryngology is the SHAM operation of cortical mastoidectomy done for Meniere's disease.

Recently we excised fronto-ethmoidal osteoma by Lynch Howarth approach. The patient did well for six months after which when he started complaining severe pain on left side. A post-op CT PNS showed absolutely normal sinuses. Patient did not get relief with normal analgesics. A psychiatric consultation was taken and showed underlying severe depression. Antidepressants and antiepileptic medicines failed to cure his pain and he started showing signs of suicidal tendency. He repeatedly requested to explore again the operated area. After much deliberation, we took him to



OT, gave incision over the previous scar and incised some fibrous tissue and resutured. It is now six months after the revision of scar tissue that patient is no more complaining of any pain and is quite happy. Minor revision of scar tissue acted as a placebo. In such situations, psychiatric consultation is very useful.

## **References**

- Bernstein L (1972) Aesthetic anatomy of the nose in rhinoplasty. Laryngoscope 82:1323
- Linn L. Goldman IB (1949) Psychiatric observations concerning rhinoplasty. Psychosomat Med 11:307
- MacGregor FC (1976) Social and cultural components in the motivations of persons seeking plastic surgery of the nose. J Health Soc Behav Behav 8:125
- Birnmeyer G (1970) Deafness as a cause of psychic behavior disorders. Z Allgemeinmed 46(31):1555–1561
- Bailly D, Dechoulvdelenclave MB and Lauwerier L (2003)
  Hearing impairment and psychopathological disorders in
  children and adolescents. Review of the recent literature
  Encephalocoele 29(4 Pt 1):329–337
- Clark MR, Sullivan MD, Fischl M, Katon WJ, Russo JE, Dobie RA and Voorhees R (1994) Symptoms as a clue to otologic and psychiatric diagnosis in patients with dizziness. J Psychosom Res 38(5):461–470
- Sloane RB (1964) Psychological aspects of headache. Canad Med Ass J 91:908–911
- Action on ENT, Good Practice Guide. The NHS Modernisation Agency, 2002

- Mathieson L (2002) The voice and its disorders, London: Whurr Publishers Ltd
- Millar A, Deary IJ, Wilson JA and Mackenzie K (1999) Is an organic/functional distinction psychologically meaningful in patients with dysphonia? J Psychometric Res 146:497–505
- 11. Harris T, Harris S, Rubin JS and Howard DM (1998) The voice clinic handbook. London: Whurr Publishers Ltd
- Salmon P (2000) Psychology of medicine and surgery. A guide for psychologists, counsellors, nurses and doctors. New York: J. Wiley and Sons Ltd
- Deary IJ, Wilson JA Carding PN, Mackenzie K (2003) The dysphonic voice heard by you, me and it: differential associations with personality and psychological distress. Clin Otolaryngol 28:374–378
- White A, Deary IJ and Wilson JA (1997) Psychiatric disturbance and personality traits in dysphonic patients. Eur J Disorder Comm 32:307–314
- Morrison M, Rammage L (1994) The management of voice disorders. London: Chapman and Hall
- Aronson AE (1980) Clinical voice disorders. New York: Thieme
- Morrison M, Rammage I and Emami AJ (1999) The irritable larynx syndrome. J Voice 13:447–455
- Deary IJ, Scott S, Wilson IM, White A, MacKenzie K and Wilson JA (1997) Personality and psychological distress in dysphonia. Br J Health Psychol 2:333–341
- House A and Andrews HB (1987) Psychiatric and social characteristic of patients with functional dysphonia. J Psychom Res 31:483–490
- Ebeling O, Ott S, Michel O and Stennert E (1996) Self induced diseases in ENT medical practice. HNO 44(9): 526–531

