

## PSYCHOSOMATIC ASPECTS OF RHINOLOGY

by

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After a general introduction, psychosomatic consideration of the nose will be given both from structural and functional point of view, followed by a short survey of our own investigations. These investigations concern a group of patients suffering from rhinitis vasomotorica, a group of patients suffering from bronchial asthma and a third group with disturbances in the digestive tract.

As a **general introductory** remark we should first of all like to point out that the nose deserves more attention from a psychological point of view than is commonly given; if Cleopatra had had a different nose, history might have taken a different course. The nose, psychologically speaking, is more than a conglomerate of tissues; it constitutes an important part of **Schilder's** concept of "body-image". This, as we know, consists of the total pattern of representations people have with regard to their own body. This concept is different for each individual and in case of the nose, its practical value may become evident through the story of *Cyrano de Bergerac*.

Thus, the structural aspects of the nose, resulting in aesthetical appearance, must be accorded psychological importance.

The same applies also to the function of the nose as an olfactory organ. The function of smelling may be considered as being of less importance in the case of man than it is in case of lower organisms; however one should not forget that in the case of humans, too, the olfactorial function is, from a psychological point of view, even more significant than is usually assumed. Many examples could serve as illustrations in this respect, such as the special meaning of smell in the community and in sex.

We will now consider the nose from a **structural viewpoint**. In the first place let us say a few words about its symbolic meaning. In colloquial language we know several expressions in which the nose leads to sexual associations. The nose may have a meaning as the phallus in connection with its corresponding structure i.e. its marked place in the body-image and possibly the combination of hard and soft tissues.

Furthermore the correspondence between nose and vagina with regard to nostrils and wings of the nose, is striking. All kind of sexual conflicts, such as castration-anxiety, latent homosexuality and masturbation can be projected upon the nose because of this correspondence in structure. Several examples can be found in literature in this respect (**Hollender, Goldmann, Rümke, K. A. Menninger, W. Th. Winkler, L. J. Saul**).

Important in this respect is the place occupied by the nose in the body-image. The impression our face makes on the outside world often directly determines the behaviour of the outside world towards us and naturally vice versa. The central localisation of the nose and its psychological meaning become clear in the well known dutch proverb: „Wie zijn neus schendt, schendt zijn aanzicht”, corresponding with the english proverb: “It’s an ill bird that fouls its own nest”, but which literally means “Who disfigures his nose, disfigures his face”. (cf. cut off one’s nose, to spite one’s face — sich ins eigene Fleisch schneiden.)

Experience shows that any deviation of the nose often has a particular influence on the development of personality structure.

It is quite understandable, that someone being of the opinion that his nose does not suit his boy-image, will look for ways to change it. Thus we arrive at **rhinoplastic**. Experience teaches that a certain part of those people consulting a plastic-cosmetic surgeon, show maladjustment from a medical-psychological point of view. They are particularly people who mystically believe that some interference can realise their wish for a transformation from “the ugly duckling” into “the beautiful swan”. Our experience, that we often have to do here with schizophrenics, has been substantiated by the wealth of data of **Linn** and **Goldmann**; it sometimes happens that these people impress us as sufferers from essential hypochondria.

Even a so-called rhinoplastic syndrom has been postulated, i.e. a symptom-complex in the sense of a general narrowing of the ego, a strong inhibition, a disturbance in concentration and particularly a pathological fixation of attention to the nose (**Hill** and **Silver**). Superficial as well as more thorough psychological investigations show that we are dealing here with a symbolic expression of the unconscious wish to transform or strengthen one’s own sex. According to our own comparatively small experience, the kind of surgical interference only results in temporary improvements. Though the literature in this respect (**Linn**, **Goldmann**, **Hill**, **Silver**, **Hollender**, and **Rümke**) may not be in entire agreement, often the results are met with scepticism.

We should like to stress here that transformation of the nose goes hand in hand with a change in the way one experiences one’s body-scheme and subsequently one’s own “self”. Characteristic are the following words of a patient after a cosmetic operation, which she undertook against our advice: “After that nose-operation, I have become a different person”. This sensation, for her, meant a new disturbance.

We now come to a short consideration of the nose from a **functional point of view** and should like to reflect once more in a few words upon its symbolic meaning. We know the psychoanalytical interpretation of a reddening of the nose, i.c. swelling up of the corpora cavernosa, viz. it possible parallel with the swelling up of the corpora cavernosa penis. Mutatis mutandis nose-bleeding as equivalent to menstruation can be mentioned here. We may also refer to the work of **Wolff**, **Holmes** and **Fenton**) who are of the opinion that particularly in case of a state of anxiety, the nasal mucosa swell up. As for the psychological meaning of the nose as an organ of smell, it may be mentioned that **Bieber** assumes that the olfactorial function is of primary

importance for the development of hetero-sexual attraction. **Wilson** sees hay-fever as an expression of unsatisfied olfactorial sexual curiosity.

A consideration of the psychological meaning of the **nose as part of the tractus respiratorius** implies the remark that not only physical and chemical influences but also psychological factors influence the condition of the nasal mucosae (**R. A. Fenton, Mac Aucliffe et al, W. L. Post, T. Graham et al and T. H. Holmes et al**). Psychosomatic factors in the etiology of rhinitis vasomotorica and of other nasal disturbances were already indicated in 1935 by **K. A. Menninger** when he spoke of a "psychogenically determined cold". The occurrence of a relation between colds and psychological as well as sociological factors could be statistically verified by several investigators. Furthermore those investigations may be mentioned, which verified the condition of the mucosa under severe emotional stress; according to these, various nasal reactions are supposed to be linked with feelings of fear, hostility, guild and disappointment.

Finally we come to a short summary of our **own investigation** concerning the psychological backgrounds of rhinitis vasomotorica. For this purpose as has already been pointed out we compared a group of patients with rhinitis vasomotorica, a group of patients with bronchial asthma and a group of patients suffering from disturbances in the digestive tract.

Basing ourselves on literature we drew up a set of hypotheses which were verified by means of psychological examinations, particularly of the Rorschach-test. These hypotheses were the following:

1. patients with rhinitis vasomotorica show more hysterical characteristics whereas patients with bronchial asthma show more compulsive obsessional characteristics.
2. Patients with rhinitis vasomotorica try to escape from emotional stimulations, particular by strong control over whatever comes to them from the outside world.
3. A sufferer from rhinitis vasomotorica strongly fears destruction of his own organism, this fear expressing itself in overt anxiety.
4. Patients with rhinitis vasomotorica are introvert in contrast to the other groups.

Our statistical elaboration of the results of the Rorschach-inkblot-test taught us that the hypothesis according to which patients with rhinitis vasomotorica are more introversively orientated and have strong control over provocations from the outside world could be completely affirmed.

Furthermore it was found that patients with rhinitis vasomotorica in fact show a strong fear of destruction of their own organism, but that this fact does not imply the occurrence of overt anxiety. The discharge of the fear mainly takes place along subcortical paths and has, in particular to do with sympathal mechanisms.

The first hypothesis could not be affirmed.

We are conscious of the fact that much more statistical work in this field has still to be done. We consider our modest investigation of importance in so far as it has indicated the existence of a relationship between disturbances in the upper parts of the respiratory tract and emotional stress-situations.

## LES ASPECTS PSYCHO-SOMATIQUES DANS LA RHINOLOGIE

Après une introduction générale, cette étude psychosomatique traite la signification du nez du point de vue structurel en donnant une impression de sa signification symbolique, de sa place dans le concept du „body-image” selon Schilder et des problèmes psychiatriques qui naissent autour de la rhinoplastie.

Ensuite les auteurs donnent une considération psychologique du nez, mais cette fois-ci du point de vue fonctionnel, en discutant particulièrement les déterminants psychosomatiques dans l'origine de plusieurs perturbations.

Finalement l'investigation propre: une étude comparative entre les caractéristiques psychologiques d'un groupe de malades souffrant de rhinite vasomotrice, d'asthme bronchique et de perturbations psychosomatiques de l'appareil digestif.

Quelques hypothèses ont été rédigées: l'une selon laquelle les malades souffrant de rhinite vasomotrice cherchent à éviter les irritations émotionnelles au moyen d'un contrôle puissant sur ce qui se présente du monde extérieur et l'autre selon laquelle les malades souffrant de rhinite vasomotrice ont une orientation introvertie. Ces deux hypothèses ont pu être confirmées statistiquement.

### REFERENCES

1. Alexander, Franz, Psychosomatic Medicine, London, George Allen & Unwin Ltd., 1952.
2. Bell, G. H. J. N., Davidson and H. Scarborough, Textbook of Physiology and Biochemistry, 1961.
3. Bieber, I., Olfaction in sexual development and adult sexual organization. Am. J. of Psychother. (1959); vol-13; p-851.
4. Boss, M., Einführung in die psychosomatische Medizin, Hans Huber, Bern/Stuttgart, 1954.
5. Buytendijk, F. J. J., De vrouw, haar natuur, verschijning en bestaan. Een existentieel-psychologische studie. Utrecht, Spectrum, 1951.
6. Despert, J. L., Emotional factors in young children's colds. The Med. Clin. of North Am. (1944), May, vol-28; p-603.
7. Deutsch, H., Psychology of Women, New-York; Grune and Stratton (1944) vol-I, (1945), vol-II.
8. Dochez, A. R. and Hanger, F. M. Jr., The Common Cold, New-York: Cornell Univ. Med. College; 1925.
9. Dunbar, F., Emotions and Bodily Changes. New York; Columbia Univ. Press; 1943.
10. Fenton, R. A., Some observations on nasal neurology. Arch. Otol and Laryng. (1941); vol-50; p-492.
11. French, Th. M. and Fr. Alexander, Psychogenic Factors in Bronchial Astma. Psychos. Med. Monogr. IV; 1941.
12. Grace, W. J. and D. T. Graham, Relationship of specific attitudes and emotions to certain bodily changes. Psychos. Med. (1952); vol-14; p-243.
13. Graham, D. T., S. G. Wolff and H. G. Wolff, Changes in tissue sensitivity associated with varying life situations and emotions, their relevance to allergy. The J. of Allergy (1950); vol-21; p-478.
14. Grinker, R. R. and J. C. Spiegel, War neuroses in North-Africa. New York, Josiah. Macy Jr. Foundation, 1943.

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