Review Article

Therapeutic methods for psychosomatic disorders in oto-rhino-laryngology

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Abstract

Psychosomatic disorders such as tinnitus, acute hearing loss, attacks of dizziness, globus syndrome, dysphagias, voice disorders and many more are quite common in ear, nose and throat medicine. They are mostly caused by a number of factors, although the bio-psycho-social model does play an important role. Initial contact with a psychosomatically ill patient and compiling a first case history are important steps to psychosomatic oriented therapy. This contribution will sum up the most important otorhinolaryngological diseases with psychosomatic comorbidity and scientifically evaluated methods of treatment. The contribution will also introduce the reader to important psychosomatic treatment methods from psychotherapeutic relaxation techniques to talk therapy. To conclude, the contribution will discuss the criteria for outpatient as well as inpatient treatment and look at the advantages of psychosomatically oriented therapy, both for the patient and for the doctor.

Keywords: psychosomatic illness, otorhinolaryngological disease, psychosomatic therapy, psychotherapy

1. Introduction and Definitions

What is a "psychosomatic disorder"?

Everybody is affected by the reciprocity of physical and psychological processes.

Psychosomatic medicine is the type of pathology which believes that psychological processes play a significant part in the emergence of physical troubles.

Psychosomatic disorders are often caused by a number of factors, whereas somatogenic and psychogenic influences play a part and can both cause an illness and sustain it [1].

As organ physicians, we are normally inclined to pay more attention to the somatic aspects of an illness in its diagnosis and treatment, thereby disregarding the significance of psychological and social factors. When our treatment measures fail to produce the desired results, we are often as equally frustrated as our patients. Medical frustration is often reflected in statements such as: "You will just

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have to live with it; there is nothing we can do for you."

Job dissatisfaction and burnout syndrome resulting from this sort of experience therefore also belong to the order of the day for doctors. A survey by the Department for Psychosomatic and Psychotherapy at the University of Gießen showed that half of the doctors asked thought that their lifestyle was detrimental or very detrimental to their health. At least 20% of the doctors suffered from burnout syndrome [2].

The following comments should help make readers more sensitive to psychosomatic disorders, give an overview of the most important types of diseases in the field of otorhinolaryngology, briefly illustrate psychosomatically oriented case history and diagnostic procedures and explain the proper types of therapy concept.

2. Psychosomatic Diagnostics

A psychosomatic connection to an organic disorder cannot solely be assumed simply because there is no adequate organic finding. "We didn't find anything in the check-up, so it must be something psychological", is an incorrect and hurtful evaluation for patients, which implies that they are not really ill and that they are only imagining or simulating an illness.

What is needed in each case is a positive diagnosis which takes socio-biographical case history and the patient's current situation [3] into account, i.e. proof of a psychological disorder such as anxiety or depression, or evidence of a psychological connection such as the beginning of ringing in the ears coinciding with a hefty argument.

2.1 As Otorhinolaryngologists, which Possibilities are open to us for Diagnosing Psychosomatic Disorders and Administering Proper Therapy?

Besides our technical knowledge, our most important medical instrument is the ability to listen to a patient emphatically and without prejudice and to build up a relationship of trust between patient and doctor during the first talk. This includes asking the "right" questions. In this manner, we try to understand and bridge the connection between the patient's physical symptoms and their biography and emotional situation.

The following section illustrates how a check-up is structured so that it takes psychological and organic aspects into account adequately.

The following questions are essential:

Question 1: "What seems to be the trouble?"

Patient should explain their troubles in their own words, i.e. "there is a permanent ringing in my ears", instead of "I have tinnitus". The doctor has to watch how patients introduce themselves and which emotions can be picked up on in the foreground ("I feel insecure", "I am suffering", "I am irritated").

Question 2: "When did the symptoms first arise, what caused the trouble, and what coincided with the trouble?"

The doctor will then proceed to ask the patient if the troubles have become worse or whether there has been an improvement. In this phase, the doctor must remain persistent, as patients often tend to start by saying "I can't remember anymore", or "there hasn't been any change ".

The ear, nose and throat doctor can now start physical examination of the patient while continuing the conversation. Please remember that even if a patient seems psychologically ill at first glance, one must never leave out organic clarification of the ailments. Patients should be informed of the results of a physical examination in an understandable and respectful manner ("the hearing test found that your hearing threshold level is normal", instead of "there's nothing wrong with you ").

Question 3: "Have there been any drastic changes in your life recently? Have you had any bad experiences?"

The next important point is to ask patients about their individual circumstances when the trouble started.

Uexküll's biopsychosocial model [4] should be considered here: factors which cause or lead to illness can be found in biological, psychological and social circumstances, and health means well-being in all of these areas.

The doctor should pay attention to possible connections between an illness and crises in a patient's life (unemployment, divorce, death of person to whom the patient related, etc.).

Question 4: "Have you had problems with your ears/nose before?"

What sort of experience of illness have patients already had with the afflicted organ system; have they always suffered from ear problems; or, did the mother suffer from headaches? This makes it clear to the patient how to place biography and family history in context.

Question 5: "What steps have you taken so far?"

What has the patient done to regain health; which coping strategies have they developed? How successful were they? How many colleagues have already tried forms of treatment? This answers the question of what other forms of treatments have already been tried and which therapeutic possibilities are still left open.

Question 6: "How do you picture your treatment?"

This question addresses patients' willingness to cooperate in treatment actively. An aggressive response from patients, such as "That's your job to know, you're the doctor!" often signalises a lack of wanting to cooperate actively and assume responsibility for oneself. Treating a patient against their will makes no sense, for instance sending them to a psychotherapist without their own motivation or incentive to do so rarely brings the proper results. It is equally inadvisable to belittle a naturopathic or homeopathic treatment unquestionably with the words "that doesn't work anyway".

For a skilled examiner, the time needed to compile a psychosomatically oriented medical history is only marginally longer than for a "normal" ear, nose and throat case history. Taking the bio-psycho-social model into account has the invaluable advantage of giving patients the feeling that their disorders have been accepted and are being taken seriously and that they can therefore build up a relationship of trust with the doctor. This form of medical history is also part of the therapy: it assists in the patient's insight into psychosomatic connections and thereby reduces their reluctance towards this sort of therapy concept.

2.2 Questionnaires

Questionnaires are helpful and can save time, but cannot fully replace consultation with the doctor. Before using a questionnaire, the physician should have a clear idea of what needs to be found out. The patient must also be willing to cooperate.

The tinnitus questionnaire drafted by Goebel and Hiller (TF), for instance, looks at tinnitus-induced cognitive and emotional impairments [5]. Beck's Depression Inventory (BDI) indicates how severe depressive symptoms are. Beck's Anxiety Inventory (BAI) facilitates an exact conclusion on the occurrence and severity of clinically relevant anxiety. The revised Freiburg Personality Inventory (FPI-R) looks for personality factors specific to age and gender such as how happy patients are with life, social orientation, performance and success orientation, aggression disposal, health concerns, physical troubles and more. All of the aforementioned questionnaires are validated and chronologically acceptable. The Test Centre of Hogrefe Publishing in Göttingen/Germany provides further information on questionnaires.

3. Ear, Nose and Throat Illnesses with Psychosomatic Comorbidity

3.1 Ear Illnesses

3.1.1 Tinnitus

Tinnitus, i.e. hearing sounds where no external sound source is present, is to a certain extent a symptom of our time. The symptom becomes an illness when the patient starts to suffer. 50 years ago, tinnitus therapy was insignificant; in today's media age it is a mass phenomenon and a business worth millions of dollars. The number of therapy forms on offer and therapeutic combinations [6], [7], the diversity of terms used and the lack of comparable studies make proper assessment extremely difficult. Moreover, proper studies are hard to come by [8]. Surveys combine the most disparate of therapy elements, even medication treatments. Proper comparability is therefore hardly possible.

Until now, the most popular form of all of these combination methods, Tinnitus Retraining Therapy, founded by Hazell and Jastreboff, has managed to show that counselling is an important and successful element of therapy when treating chronic tinnitus [9], [10]. There are now various therapy alternatives with varying rates of success [11].

I would like to go into the counselling concept in particular. This is a form of illness-related consultation where the ear, nose and throat physician takes time to inform patients of the organic and psychological features and relationships of their symptoms; something which should normally go without saying. Some studies see this as the significant part of tinnitus retraining therapy [12].

Most therapies combine the following individual therapeutic components in various configurations: autogenic training, progressive muscle relaxation according to Jacobson, biofeedback, hypnosis, Tai Chi, Qi Gong, Yoga, acupuncture, depth psychology talk therapy, cognitive behaviour therapy. In most patients' cases, combining several methods seems to make sense, whereby behaviour therapy methods are used on the whole more frequently than analytical methods [13].

Chronic tinnitus among adults, children and adolescents is best explained as a psychophysiological disorder under consideration of psychological and social aspects. The harm done to the quality of life can be considerable and the illness is often accompanied by anxiety disorders, depression as well as trouble concentrating and sleeping [14]. Patients feel both cognitively and emotionally afflicted [15]. What is interesting is the fact that inter-individual differences arise in early phases which indicate great psychological stress, depression and maladaptive stress handling [16], and which therefore make early psychosomatic intervention seem sensible.

Randomised and controlled surveys show that cognitive behaviour therapy, biofeedback and progressive muscle relaxation are effective [17], [18], [19], [20], [21]. As a stress-reducing measure, cognitive behaviour therapy is also effective over the Internet [22], [23]. Counselling and group therapy on their own, after Kröner-Herwig, prove to be similarly effective [24]. Tinnitus therapy places great importance on perception management as it can be assisted with various psychological methods [25]. Relaxation methods are generally advisable for directing perception to positive illness coping aspects.

Biofeedback proved to be particularly effective in cases where muscular tension and stress situations were detected [26]. Patients' satisfaction was generally high and caused by improved ability to deal with the ear's sound. Tinnitus diaries, however, only had a marginal effect on the tinnitus itself [18].

Self-hypnosis and attentive listening on the part of the doctor are equally capable of reducing the gravity of the tinnitus [27]. In a Scandinavian study, 73% of the patients reported disappearance of the sound during the sessions in comparison to 24% who were treated with an acoustic stimulus [28]. Long-term effects were only detectable in the self-hypnosis group.

The combination of behaviour therapy with relaxation methods for learning coping strategies led to a

significant reduction in impairment by the ear's sound and an improvement in the general mood over a three-month follow-up period [29]. Positive effects on sleep disorders, headaches and feelings of dizziness were also visible. However, this study did not incorporate a control group. Other authors have also confirmed the effectiveness of these multimodal forms of therapy [17], [30].

Generally, all of these studies compared the effects of the therapy groups with a control group, made up of patients waiting for therapy. Critical comment must be levelled at the fact that there are no studies which safely rule out a Rosenthal effect. This requires a control group which receives the same medical time and attention as the verum group, except with a proven ineffective form of therapy. One other important point to be criticised is that the groups are sometimes very small with very few patients.

No surveys found acupuncture to be effective. Only one single case study described a positive effect of Tai Chi on the ear's sound [31].

Yoga, as a sole form of tinnitus therapy, proved equally ineffective [32].

Hypnosis as a method of deep relaxation showed positive effects, however proved to be more broadly effective in combination with cognitive behaviour therapy and stress management. Only a few case studies and smaller studies reported successful remedies or improvements solely on the basis of hypnosis [33], [34], [35], [36]. Patients were more able to deal with their ear's sound, even though the volume and quality remained unchanged [37].

Advice for the Doctor: We recommend pointing out to patients in the first consultation that psychological factors are important, either as a cause or as a consequence of tinnitus. Neuro-otological counselling also makes sense for all forms of hearing disorders - patients with more background understanding are less afraid or anxious [38], [39]. In the case of decompensated tinnitus, social support, social stress impact and coping strategies should be taken into account as further prognosis factors [40]. The more patients suffer from tinnitus, the more they will profit from integrated psychosomatic and otological therapy [41]. Psychotherapeutic talks in combination with different relaxation methods such as progressive muscle relaxation, biofeedback or even hypnosis are more effective than relaxation methods on their own. Psychological methods tend to be more successful in the long term than medicinal treatments which often only achieve short-term results [8]. Most studies refer to cognitive behaviour therapy, and are less based on depth psychology talk therapy. Both are treatment methods which can only be administered by trained psychotherapists and which therefore require referral from the otorhinolaryngologist.

In their practices and clinics, ear, nose and throat doctors may perform and charge for talks as part of their psychosomatic primary healthcare. According to this author's experience, most patients achieve a stabilising effect and improvement of the disease, or are motivated to seek psychotherapeutic therapy after approximately 5 sessions.

3.1.2 Hyperacusis and Phonophobia

Hyperacusis means hypersensitivity over the hearing's entire spectrum of frequencies. In the case of an anxious person or a fear disorder, phonophobia can arise, a highly increased sensitivity to particular sounds regardless of their volume [38]. Hyperacusis often arises as the result of a tinnitus. As with tinnitus, audio perception retraining and perception management are important therapy components [42]. Here, psychosomatic therapy addresses the anxiety component, which should be the focus of the treatment. Recalling prevention behaviour and new evaluation of acoustic stimuli which cause anxiety are at the centre of therapy planning. Cognitive behaviour therapy approaches are also applicable. Exposition treatment, positive strengthening and social competence training have also proved effective in singular case descriptions. As with tinnitus, extra use of relaxation methods is also useful.

Advice for the Doctor: What is applicable to tinnitus to some extent also applies to hyperacusis and

phonophobia. Giving the patient advice on the physiological and psychological features, such as the anxiety component in this case, is of decisive importance. All forms of relaxation method have an anxiolytic effect and are useful for integrating in the treatment.

3.1.3 Acute Hearing Loss

In the case of acute hearing loss patients suffer from sudden and detectable inner ear damage. Various studies showed that in over 70% of the cases examined [43], acute hearing loss occurred in situations of acute psychological stress. The acute stress could generally be interpreted as decompensation of a chronic conflict. High performance expectations, sense of duty, pronounced sensitivity and suppression of aggressive impulses in combination with feelings of guilt are often characteristic features of patients [44], [45]. A study [46] examined the psychological structure of patients suffering from acute hearing loss. Patients with a neurotic personality structure do not profit from organic therapy.

Psychophysiological factors can equally influence rheological factors. As described in the DGHNO [German Society for Otorhinolaryngology] guidelines, acute hearing loss therapy should therefore include both organically oriented approaches as well as psychologically oriented approaches.

Logically, one column of therapy for psychologically stressed and burdened patients are relaxation methods. Sustainable relationship structures, an emotionally stable personality and a reduction in stress factors showed prognostic positive effects [47].

Advice for the Doctor: Right at the start of the first consultation, the doctor should ask about acute as well as chronic stress. Patients are commonly aware of this and react positively to the doctor's interest in their personal life. Besides offering organic forms of treatment, encouraging patients to learn relaxation methods is also a sensible approach. If autogenic training or progressive muscle relaxation cannot be administered in the practice, courses at adult evening classes can also be suggested. Far-eastern exercises such as Tai Chi, Qi Gong and Yoga, which are increasingly on offer and popular among patients also contribute to relaxation. Patients should only be given sick leave, however, if a sick certificate actually reduces stress. If patients are under too much stress at home or fear for their jobs, the doctor must take this into consideration.

3.1.4 Psychogenic Hearing Disorders

A psychogenic hearing disorder is an subconscious, mostly symmetric, double-sided medium to high-level hearing impairment. One characteristic is that the impairment is only pointed out in subjective hearing tests and that it is not evident in objective methods (OAE, BERA). Informal talk or telephone conversations are also possible without any problems [4]. From a psychotherapeutic point of view, this is mostly a conversion disorder. In the case of children, conflict situations could be observed in school and family [48]. The assumption is that a certain percentage of sudden acute hearing loss cases are psychogenic hearing disorders which went unrecognised [49]. Randomised diagnostics and / or therapy studies are not available on this topic.

Advice for the Doctor: Patients need time to talk about their problems, anxieties and fears and not just about their hardness of hearing. It is not sensible to confront them bluntly with the fact that they do not have an organic hearing impediment. It is essential for therapy that patients recognise which importance subjectively perceived hearing impediments have in their lives. The aim is to let patients grasp the connection between the hearing disorder and their psychological problems. Coming to terms with the conflict situation is one of the most important conditions for overcoming the psychological dysposition [50]. Some authors also recommend suggestive treatment methods - especially for children [51].

In the case of adults and a short duration of illness, prognosis is generally good. With children, psychiatric illness should be ruled out.

3.1.5 Hardness of Hearing and Deafness

Extreme loss of hearing up to deafness, whether acquired or from birth, represents a massive stroke of fate for people. We are therefore dealing with a somatopsychic situation. No statistics are available on how many hard of hearing patients break with social contacts and are isolated out of bitterness or depression. However, every ear, nose and throat physician is aware of this problem. The hard of hearing or deaf patient is not just a normal individual without the facility to hear; they, and often their fellow human beings, doubt their intellectual capabilities and social competence. This often leads to aggressive behaviour. Hardness of hearing is often kept secret for a long time. The lack of acceptance for wearing hearing aids is a visible sign of a patient's reluctance. With hard of hearing children, doctors must also take the psychological state of the parents into account, who in many cases complain of significantly increased psychological strain way beyond the time the disorder was diagnosed.

These considerations lead to the therapeutic approach (no studies are available).

Advice for the Doctor: Empathy means listening to patients with compassion and putting oneself in their position (Balint), and includes non-verbal means of communication which play a decisive role when giving support and assistance to the hard of hearing and deaf. These patients need time with the physician to express their suffering and anxieties and relieve their aggression.

3.1.6 Morbus Ménière

The classic symptoms of Morbus Ménière's Disease are attacks of rotary vertigo with nausea, low frequency hearing loss and tinnitus. The attacks, which occur without warning, frighten many patients and lead to phobic reactions. The "proper" psychosomatic oriented way of dealing with the first traumatising attack is of decisive importance for the further course of the illness [52]. It is undisputable that stress plays a role as an accompanying state or even as the cause of Morbus Ménière's Disease [53].

Advice for the Doctor: It is important for the doctor to empathically understand the situation, which is seen as existentially threatening by patients, to inform the patients of what is happening physiologically when Morbus Ménière's Disease occurs, as well as of the possible organic and psychological types of therapy. In our experience, combining vestibular training with bodily relaxation methods, such as progressive muscle relaxation for instance, has proven beneficial.

3.1.7 Vertigo

Vertigo is a subjectively experienced sensation of balance disorder both in physical and/or psychological regard [4].

In general medicine in particular, dizziness is a common cardinal symptom and often a psychophysiological accompaniment to stress, anxiety and depression [54], [55]. Similarly, anxiety and great insecurity can cause dizziness symptoms [56]. A one-sided, purely somatic clarification, without taking psychosomatic factors into account, runs the risk of letting the state become chronic.

Anxiety disorders, such as agoraphobia are often accompanied by feelings of "dizziness". These forms of illness belong to the domain of behaviour therapy. An acute bout of dizziness is a critical event in life and, as such, causes great anxiety. A lack of coping strategies and dysfunctional cognitions can lead to persistence in anxiety and with it to symptoms of dizziness [57].

With children, psychosomatic illnesses are often accompanied by a feeling of dizziness [58].

Combined with vestibular training, cognitive behaviour therapy has proven effective in the rehabilitation phase, without having an effect on anxiety or depression [59].

Advice for the Doctor: Right at the beginning of a dizziness disorder, the doctor should immediately clarify the psychological factors and administer interdisciplinary treatment, insofar as it is necessary, to prevent the disorder from becoming chronic [60]. Giving patients the proper psychological education is

also required on the part of the ear, nose and throat physician so that patients can assess the situation realistically ("I feel dizzy", or "I am scared of feeling dizzy") [61]. Previous stress situations and experiences of loss must be explored and if necessary put into context with their symptoms of dizziness in a manner understandable to patients, so that they are not frustrated by being considered a simulator. The combination of vestibular training with relaxation methods also seems to be a sensible option in this case. If the anxiety disorder is pronounced, consider using psychopharmaka [62].

3.2 Upper Respiratory Diseases

3.2.1 Acute and Recidiving Infections/Acute Rhinitis

Whether as a doctor or as a patient, we are all aware of the phenomenon that we catch an infection a lot quicker when we are under stress (night watch!). Stress can lead to an increased occurrence of respiratory infections. Increased psycho-social stress reduces the local immune response to viral or bacterial infections resulting in increased susceptibility to common cold illnesses [63].

Stress management can lessen sick leave days, regardless of sIgA secretion or negative moods [64]. Relaxation therapy for children with positive suggestions (imagine increase in immunoglobulins) led to an increase in the sIgA as well as sIgA/albumin quotas as a parameter of local mucous-membrane immunity [65].

Advice for the Doctor: No therapy studies are available. In light of the study findings on aetiology of respiratory infections, it would seem to make sense in the case of recidiving troubles to ask about increased stress and to make patients aware of such contexts. A stress management plan and relaxation methods as a prophylactic treatment are sensible measures.

3.2.2 Chronic and Allergic Rhinitis

Chronic Rhinitis is a common illness. Characteristic symptoms are a blocked nose, runny nose and frequent sneezing. The problems mostly occur to varyingly severe degrees and can stay for years. Because of the permanence of the problems and nuisance caused by them, it can lead to psychological disorders (somatopsychic genesis).

Examinations of psychosomatic aspects are rare; no therapy studies are available. However, colloquial expressions such as "I have had it up to here" figuratively describe a connection between physical symptoms and psychological constitution.

At first glance, allergic and psychosomatic reactions seem to have nothing in common. The one consists of a clearly defined immunological event, the other describes something which is hard to measure objectively and is hardly verifiable as a psychoimmunologic reaction.

Studies into psychoimmunology have shown that allergic reactions can be curbed with hypnotic suggestion [66]. Experimental studies furthermore found out that plasma histamine concentration rises under pressure [67]. Allergies can develop from auto-suggestion and strong feelings of anxiety let skin react more sensitively to potential allergens. Several studies from Hungary [68], [69] showed a correlation between allergic problems and depression and anxiety. 74% of the patients examined with panic disorders also had type 1 allergies requiring treatment.

The connection between stress and increased allergic reaction could also be proved in people; however, these studies were mostly conducted with asthma and neurodermatitis [70]. While therapy studies and psychosomatic oriented treatment concepts are available for asthma and neurodermatitis [71], [72], there are no such feasible therapeutic concepts or studies for allergic rhinitis, so that we could only speculate until now.

Advice for the Doctor: Allergies are dependent on several factors. In this author's experience,

anxiety and depression play a role as a comorbidity, in particular when it comes to perennial allergies or multiple allergisations. Whether they were present before the allergy or whether they occurred as result of a chronic illness which impaired the quality of life cannot be fully assessed.

From a therapeutic point of view, making patients aware of the possibility of an extra anxiety and/or depression seems a sensible option - "I can understand that these constant problems might be depressing for you or that you are afraid that they might get worse". Depending on the patient's initial psychological circumstances, suggestive relaxation methods can also bring relief. Like with all chronic illnesses, it is also useful if patients develop coping strategies. Upon suspicion of a relevant anxiety disorder or depression, referring the patient to a psychotherapist is advisable. If patients feel they are being taken seriously by the doctor and can sense the doctor's efforts to help, the referral to a psychotherapist won't be quite as difficult.

3.2.3 Sick-building Syndrome

These are patients who have developed a massive form of hypersensitivity against any type of chemical following alleged or actual exposure to chemical substances. Organically measurable damages are mostly not detectable and neither are any such further allergies. Patients often suffer from huge problems, and quality of life is vastly reduced.

Until recently, doctors were only able to detect psychosomatic and, to a certain extent, neurotic disorders in patients. However, most patients will vehemently protest, so that any form of proper attempt at therapy is doomed to failure. No feasible psychosomatic or psychiatric treatment concepts are available [71].

Advice for the Doctor: Affected patients are often very hard to approach, especially if the doctor calls the causality between certain chemical substances and the problems into question. Often, patients have tried various therapies in the field of alternative medicine. With their mental trauma, patients such as these are often "easy prey" for disreputable entrepreneurs.

The most important therapeutic goal here is to establish a stable doctor-patient relationship. To keep the patient from further problems, doctors should function as a contact person even if they see no possibility for treatment.

3.3 Diseases of the Pharynx

3.3.1 Glossodynia

Patients suffering from Glossodynia or Burning Mouth Syndrome belong to the "difficult" patients. The disease mostly affects middle-aged women. They are focussed on their organ problems; they complain; they suffer from severe pain; they demand that their organs are examined and ask for organ-related treatment, and often refuse insight into the psychosomatic disorder. The discrepancy between what patients experience and the lesions in the oral mucosa region, which cannot be measured objectively, is huge. This makes the doctor-patient relationship similarly challenging [73]. Patients consider themselves psychologically normal. The aetiopathogenesis is mostly unknown. Patients suffering from fibromyalgia also frequently mention pain in the mouth area [74]. No treatment studies with larger numbers of cases are available; these are mostly individual case reports. If the ear, nose and throat physician rules out an organic cause, they mostly assume a psychogenic genesis. Depressions and anxiety disorders are mostly mentioned as a comorbidity or also as causal factors [75]. Other authors consider personality changes more decisive than neurotic symptoms such as depression [76]. Similarly, stress factors play a decisive role in many patients.

Therefore, at the beginning of treatment, doctors should seriously consider administering antidepressants, if necessary anxiolytics, in combination with talk therapy [77]. There are several studies recommending behaviour therapy, yet the data is not evidence-based. Biofeedback and hypnosis as relaxation methods for reducing anxiety attacks and cognitive behaviour therapy, to

improve patients' maladaptive mindsets, can also be used for therapy in selected isolated cases [78].

Advice for the Doctor: The aim of treatment is to establish a stable doctor-patient relationship. It is the precondition for any attempt at therapy and the only possibility for preventing doctor-hopping and the resulting unnecessary diagnostic and therapeutic procedures. Talks as part of psychosomatic primary healthcare and offering relaxation methods can be conducted in an outpatient ear, nose and throat healthcare ward. Hypnosis should only be used in a psychotherapeutic setting. In many cases, patients will not be able to be "healed", but only "supported". What must be taken into account is that chronic pain can lead to changes in personality and depression. Patients with glossodynia should if necessary be treated together with an outpatient pain programme or a pain therapy. Non-induced therapy attempts should be avoided since failure can often worsen the symptoms.

3.3.2 Globus Pharyngeus

Patients suffer from a lump or foreign body sensation in the throat, sometimes in combination with increased mucous production and the feeling of having to clear their throat. Ruling out a malign disease should be the first task of diagnosis. A gastro-oesophageal reflux should also be taken into consideration. Most patients have no causal organ-pathological changes. A study in England found 5 tumours in 699 patients examined retrospectively [79]. A psychogenic globus sensation is a classical example of a conversion syndrome. In the psychodynamic sense, conversion means that the symptom is the price patients pay because they cannot bear and reject strong negative feelings such as anxiety, shame, sadness and anger. The patient's ego expresses the suppressed emotions in the form of a physical symptom [4]. The physical symptom neutralises the psychological conflict. Mostly, the globus is also associated with a tautness of the pharyngeal and laryngeal muscles which typically increases in situations of stress.

Therapy should start with an instructive talk following a careful ear, nose and throat examination. If the symptoms are recent, improvement can often already be reached quickly. What is interesting is that patients with conversion disorders are more willing to undergo hypnotic suggestion [80]. A randomised, controlled study reported a significantly improved response to hypnotic therapy in comparison to the waiting group, which remained stable until the follow-up study six months later [81]. In the case of problems which have become chronic, talk therapy also managed to achieve improvements [82]. Several isolated case descriptions and smaller studies reveal successes with cognitive behaviour therapy in conversion problems both with children and with adults [83]. In difficult cases, doctors might consider extra treatment with anxiolytics or tranquilizers.

Advice for the Doctor: I consider applying the following measures derived from behaviour therapy instructions sensible: careful examination, without any form of flight into extensive therapeutic measures (patients are normally all too willing to give their approval, even to operations); explanation of the physiological and functional mechanisms associated with the conflict constellation; acceptance of the symptoms without trying to take away the patient's symptom; setting reachable goals, regarding healthy behaviour and ignoring pathological behaviour. Hypnosis treatment and cognitive behaviour therapy require a referral to a psychotherapist.

3.3.3 Dysphagia and Phagophobia

Psychosomatic aspects and a conversion disorder often play a role in oropharyngeal swallowing disorders, especially if no organic cause could be found. Women with anxious-hypochondriac behaviour patterns are mostly affected. Dysphagia is most common in times of emotional stress and psychological comorbidity of anxiety and depression [84]. The problems mostly arise after an organically explainable swallowing disorder, such as severe tonsillitis, and persist after the primary illness has healed. They can develop so far as to cause a swallowing phobia, i.e. inability to ingest solid foods or liquids [85], [86]. The symptoms can occur in combination with a globus sensation and especially with children and adolescents in combination with an eating disorder. The inability to deal with and adapt to critical situations in life is colloquially expressed in phrases such as "not being able to swallow the truth" and "getting stuck".

Because of the different forms of behaviour therapy approaches, comparisons are difficult. Smaller studies and isolated case reports show positive effects, yet larger group programmes showed no evidence of effectiveness [87]. Behaviour therapy oriented training programmes with changes to the diet and swallowing exercises are a way of helping these patients [88], [89]. Phagophobia is characterised by a fear of swallowing and this fact enhances swallowing problems. If the anxiety disorder is at the forefront, psychological diagnostics are indispensable. A small study with 5 schoolchildren suffering from globus sensations, dysphagia and phagophobia describes the successful use of hypnosis and hypnotherapies as part of behaviour therapy interventions [90]. This therapeutic approach is also applicable to tumour patients suffering from disassociative overlay swallowing disorders. If the patient is sufficiently cognitively skilled, consider using video feedback which has been used successfully as a swallowing rehabilitation method after surgery [91].

Advice for the Doctor: This group of patients also often first consults their ear, nose and throat physicians. It is the doctor's task to rule out organic illnesses which need to be treated and to give advice on further therapy options such as swallowing exercise programmes, video feedback, hypnotherapies and cognitive behaviour therapy. The more impartially the otolaryngologist gives advice, the easier it will be for patients to accept referral to a psychotherapist. All that has been said about talk techniques with globus pharyngeus is also applicable here.

3.4 Diseases of the Larynx

3.4.1 Psychogenic Dysphonia and Aphonia

Patients with psychogenic voice disorders often first consult their ear, nose and throat doctor or a phoniatrician since they assume that the cause or their problems is organic. The necessity for psychotherapeutic treatment mostly becomes clear in the further course of treatment. What is important is that the otolaryngological examination fosters patients' willingness to undergo psychotherapeutic intervention. Psychogenic voice disorders are often connected with anxiety, depression, conversion symptoms and personality disorders. They can be seen psychodynamically as a person's creative ability to deal with a chronic inner conflict and can be the reaction to a traumatic stress experience. Symptoms often begin with hoarseness after a viral infection [92]. The hypofunctional form of aphonia is more common than the hyperfunctional form. If the disorder is a recent one, patients are often still conscious of the psychological conflict and are able to comprehend it. In these cases symptom-centred short-term psychotherapy is sufficient. Not many patients want to undergo conflict-revealing analytical therapy [93]. The combination of logopaedic treatment with biofeedback and cognitive behaviour therapy can yield success in hyperfunctional voice disorders [94]. A small new pilot study found that laryngeal and velopharyngeal biofeedback training can help if speech therapy alone does not yield sufficient improvement [95]. Biofeedback lets patients assess the changes in their own voices better during speech therapy treatment, something that is difficult to measure objectively otherwise. In interpersonal job or family conflicts, a study with 30 patients achieved good results using a combination of voice therapy and communication skills training [96]. Only a few isolated case studies are available on hypnotherapy with only partially temporary improvements.

Advice for the Doctor: Distinguishing between functional and psychogenic disorders is difficult, in particular when dealing with mixed cases with an organic and a psychological component [97]. Generally, one can assume that the shorter the problems have persisted, the more the patient can be confronted with the possibility of psychological factors as a cause. As far as psychogenic aphonia is concerned, provoking voiced sounds such as coughs or harrumphing can often have a surprise effect and lead to an improvement in symptoms. Showing empathy on the part of the doctor and reducing anxiety are decisive therapy goals. Relaxation methods such as biofeedback therefore make more sense, in combination with speech therapy as well, with the aim of reducing the mostly pathological muscular tautness in the larynx region. Voice therapy is at the forefront of severe hypofunctional disorders. More penetrative mental conflicts can only be treated with the aid of psychotherapeutic interventions, either using behaviour therapy or depth psychology.

3.4.2 Laryngeal Dysfunctions: Laryngospasm and Laryngismus

Paroxysmally occurring laryngospasms are periodic occurrences of shortage of breath in combination with a voice disorder, characterised by paradox, inspiratory adduction of the vocal chords. Laryngismus or laryngeal dystonia is a permanently persisting state of tension in the laryngeal muscles which is classically remedied with Botulinumtoxin A injections, which laryngospasms cannot. These are cases of illness with organically verifiable findings which can however be subject to psychological overlays. So far, no psychogenic escapement has been found. Depressive moods and states of anxiety were frequently observed, yet were interpreted as a psychological reaction to the organ disease which also improved after Botulinumtoxin treatment [98]. Voice therapy in combination with psychotherapy and detailed explanation for patients and their families on the aetiology of the illness are sensible therapeutic measures which do not, however, always show satisfactory results [99], [100].

Advice for the Doctor: These cases of illness primarily require organically oriented therapy. Accompanying relaxation methods, biofeedback and - in the case of psychological comorbidity such as anxiety and depression - psychotherapeutic interventions, as already mentioned in the context of psychogenic dysphonia, seem sensible.

3.5 Bruxism and Temporomandibular Dysfunction

Both disease modalities can be termed oral parafunctions; they have aspects in common and are mostly caused by multiple factors. Because of earache or myofascial pain, patients often consult an ear-, nose- and throat-specialist who is unable to find a pathological diagnosis in this region. In cooperation with dentists or orthodontists, colleagues trained in manual therapy can administer therapy to present malocclusions and asymmetries in the region of the jaw joint. In the case of therapy-resistant patients, psychosomatic components must also be taken into consideration. Several more recent, controlled studies showed a connection between bruxism and psychological factors such as depression, panic disorders, and anxious expectations and, especially in women, increased sensibility towards stress [101], [102], [103]. Job dissatisfaction, but shift work as well, led to increased occurrences of bruxism [104].

In light of these results, relaxation methods, biofeedback and psychotherapeutic interventions have been recommended for many years [105]. A sensible therapy option for children and increased levels of anxiety are muscle relaxing methods [106]. The majority of patients with bruxism and temporomandibular dysfunction respond positively to muscle-relaxing therapy, be it in the form of relaxation methods or with the aid of biofeedback approaches [107].

Together with learning coping strategies, cognitive behaviour therapy and stress management are further recommendations for therapy, as is the short-term use of Benzodiazepine [108], [109]. An improvement in the symptoms through hypnosis has only been found in isolated cases.

Advice for the Doctor: Explaining to patients what happens when they chew and grind their teeth and close cooperation with a dentist should come first in the treatment. The various relaxation methods and stress processing approaches should then follow, whereby the patient's work conditions can be of importance. If patients wish, consider using hypnosis as a method of deep relaxation. Therapy-resistant cases or patients suffering from a psychological comorbidity need psychotherapeutic treatment also in consideration of the aspect of prevention of a chronic pain syndrome.

3.6 Dysmorphophobia

With the increase in demand for aesthetic/plastic surgery in the field of otolaryngology, knowledge of the psychiatric illness of dysmorphophobia or body dysmorphic disorders is beneficial. We are dealing with patients who are compulsively tied up with seeking eternal youth on the basis of their physical attraction ("Dorian Gray Syndrome"). They are focused on small present or imaginary deficiencies in their physical appearance [110]. There is a considerable discrepancy between patients' subjective

experience and diagnostic findings which can be measured objectively. The outcome often includes emotional stress and social retreat. Patients demand surgical corrections and the nose, eyelids, concha and the whole face are especially affected in otorhinolaryngology. Typically, these patients have often undergone previous surgery but are never satisfied with the results. Depression and states of anxiety up to social phobias are common comorbidities.

Advice for the Doctor: Since this is a psychiatric illness, it is sensible to refer patients to a psychiatrist, yet patients mostly refuse to follow this advice. The otolaryngologist cannot treat this disorder and it will not be improved through plastic/aesthetic surgery procedures. The surgeon is more likely to risk being sued since the patient will always be unhappy with the results. It is therefore important to recognise this disorder on the basis of the aforementioned criteria and to decline surgery if necessary.

3.7 Malign Diseases of the Ear, Nose and Throat Region

As an illness, "cancer" provokes existential fears in nearly everybody. Most of our patients associate it with pain, suffering and death. The diagnosis leads to a post-traumatic stress syndrome in the sense of a psychological trauma in as many as a third of all tumour patients [111]. In addition to the organic disorder, the life-threatening illness often leads to a considerable reduction in quality of life, mostly because of depressions and states of anxiety. The malign otolaryngological tumours are also characterised by additional features: 1. they are often visible, or the treatment leaves visible scars, which means patients are stigmatised in their environment, and 2. in many cases of pharynx and larynx tumours, the ability to communicate and swallow is highly impaired after treatment. Studies show that after laryngectomy, patients are considerably restricted in the fields of social acceptance, social activities, sexual activity as well as in their ability to communicate [112]. Twenty to forty percent of tumour patients suffer from serious emotional impairments. One problem is that in a study with ear, nose and throat tumour patients with low social status, the medical identification of distress was particularly bad and psychosocial support as a result insufficient [113]. Younger patients especially experience a stronger impairment of quality of life and more anxieties than older patients. They therefore need more support [114]. Anxiety and depression are especially increased before the operation, among women more than men. Defensive coping strategies such as mistrust, cognitive avoidance and controlling feelings are adverse forms of coming to terms with the illness. Addictive behaviour also belongs to this group and is particularly widespread among ear, nose and throat tumour patients as regards alcohol and nicotine [115].

Intervention options mainly depend on the point in time. For patients, organ-related treatment comes first and they are often only prepared to deal with the events and take up psychotherapeutic help following treatment and rehabilitation. Ear, nose and throat patients are often also confronted with rehabilitation of the swallowing, speaking and voice functions as far as possible. Different therapy forms have proven feasible for intervention: supportive individual counselling and crisis intervention, all forms of meditative or relaxation assisting measures (focused on relaxation, learning coping strategies, positive thinking, "reframing", cognitive restructuring etc.), extensive individual depth psychology treatment as well as pair and group therapies [116]. The question of whether psychosocial intervention measures influence survival time is still a matter of highly controversial debate. However, improving the emotional situation of affected patients should be the focus of interest for treatment. Treatment should especially tackle reducing fear and anxiety, depression and despair, increasing the feeling of control, imparting knowledge of the illness and treatment options, strengthening self-esteem as well as improving compliance and quality of life.

Advice for the Doctor: The examining ear, nose and throat specialists are the most important contact persons for the tumour patient; they treat the tumour and ensure survival. They should be fully informed of the extent of the individual psychological and social impairments of their patients, openly show empathy, should recognise whether their patients have special care needs and should coordinate further necessary measures [117]. Every person's own physical image is significantly disturbed by the tumour and even more so by the operation and irradiation. The ability to speak is also commonly impaired. I therefore consider it appropriate to administer therapy forms which place

emphasis on the body, and where patients do not have to speak.

Dealing with dying and death itself often also pushes doctors to the limits of their psychological capacity. All dying patients have the right to talk about their fears and suffering, every doctor has the obligation to afford them this possibility. Doctors will only manage to do this, however, if they themselves have dealt with this topic and do not have to suppress their own fears or, even worse, transfer these to the patients. Self-awareness and Balint group work should be mandatory for all doctors operating in the field of oncology.

4. Summary of Therapeutic Methods

4.1 Relaxation Methods

4.1.1 Autogenic Training

Autogenic training (AT) is a method of concentrated self-relaxation and self-hypnosis, available either as individual or group therapy. Exercises structured along a chronological sequence which build up one after the other help sensitise to physical processes and their interaction.

This method is approved by compulsory health insurance funds and private health insurances and can therefore be charged (in Germany).

Requirements for being able to administer and charge for autogenic training sessions include taking further training courses approved by the medical boards and application to the respective physicians' association.

4.1.2 Progressive Muscle Relaxation

Progressive muscle relaxation (PM) achieves relaxation by alternating tension and relaxation in certain groups of muscles. The natural relaxation experience which follows from strong feelings of tension is used and integrated in relaxation suggestions. Therapists can use the method with the aid of tape cassettes or in combination.

Progressive muscle relaxation is a method approved by compulsory health insurance funds and private health insurances and can therefore be charged (in Germany). There are a whole range of studies which document effectiveness in psychosomatic illnesses. Requirements for being able to administer and charge for sessions are analogue to those applied to autogenic training.

4.1.3 Biofeedback

Biofeedback means receiving feedback on the activities of physiological processes in the form of optic, acoustic, or other signals with the aim of facilitating own awareness for controlling seemingly autonomous physical and mental processes.

Biofeedback is a method exclusively paid for by private health insurance companies (in Germany) and is nearly always conducted in an individual setting. Its use for clinical application is well documented, the spectrum of effectiveness however tends to be overestimated [118]. Implementing the method requires purchase of special equipment. Normally, the manufacturing companies give instructions on use. No further training is mandatory.

4.1.4 Yoga, Qi Gong, Tai Chi

Yoga is probably the oldest form of mental alternative medicinal interaction comprising a system which uses mental techniques and physical exercises with the aim of leading to greater wisdom and freedom from suffering. Its main use is still in the non-therapeutic field, however reliable and long-term improvements have been found, especially in states of anxiety and tension [118]. Although there are no invoicing options, health insurance companies (in Germany) often subsidise appropriate courses at

adult education centres or in fitness studios.

As an alternative form of therapy, Qi Gong is attracting increased attention. Loosely translated, it means "energy exercise" and consists of harmonic sequences of movement, breathing exercises and concentrated control of imaginative power. The main fields of use are to sustain physical and mental energy and, in the case of illness, to regain productivity and improve quality of life. As far as charging and administering are concerned, the same applies as to what has been said about yoga.

Tai Chi, also known as "shadow boxing", comprises motion exercises which unite breathing and movement in a strict ritual. It has a relaxing effect and helps build up physical stamina and coordination.

As far as charging and administering are concerned, the same applies as to what has been said about Yoga.

4.2 Hypnosis

Hypnosis is a medical, psychotherapeutic method of treatment which makes use of the therapeutic use of trance states. The therapist's task is to give difficult processes or traumatic experiences a new context. It is a suggestive method of treatment. A trance is a natural phenomenon which can be induced in many people. This state can be used to expand upon and strengthen a person's resources. Hypnotherapeutic approaches can be combined well with other relaxation methods, such as progressive muscle relaxation therapy for example.

Its application requires further training at state-approved further training institutes. With the proper qualifications, doctors can charge both compulsory health insurance funds as well as private health insurance companies (in Germany).

4.3 Talks as Part of Psychosomatic Primary Healthcare

"Psychosomatic primary healthcare" is an additional qualification in Germany (no additional job description) which can be attained in courses approved by the respective physicians' association. Requirements include at least 50 hours of further training, 20 of which are on theory and 30 of which are exercises on verbal intervention. 30 hours of Balint groups are also required. In the meantime, some private health insurance companies also require the physician's qualification when deducting psychotherapeutic data.

4.4 Behaviour Therapy

Behaviour therapy assumes that coming to terms with experiences in life and, with it, with illnesses is explainable through the consequences experienced and their integration into the self. By newly assessing situation and learning new forms of behaviour or adequate problem-solving strategies, it is possible to change symptoms of illnesses or their perception. Body perception, coping with illness and schooling patients have already been scientifically evaluated and integrated into the therapy of asthma and neurodermatitis [72].

The requirement for being able to administer behaviour therapy is either a qualification as a psychotherapy specialist or additional psychotherapy qualifications. This form of therapy is also administered by trained psychologists. The training guidelines and authorised institutes can be requested from the respective medical boards.

4.5 Depth Psychology Talk Therapy

Depth psychology and analysis view the first few years of a person's life as the key to understanding their behaviour and experience. Neuroses such as depression and anxiety disorders are treatment

indications.

This type of therapy either requires qualification as a psychotherapy specialist or additional psychotherapy qualifications. The training guidelines and authorised institutes can be requested from the respective medical boards.

Depth psychology talk therapy has a fixed setting, i.e. a 50 minute session always at the same time once or twice a week. Generally, a minimum of 25 sessions is needed, yet in difficult cases it can be more than one hundred.

Otolaryngologists should observe a recent study on the status of outpatient psychotherapeutic healthcare in Germany [119]. On average, patients wait for 4.6 months for psychotherapy and every second patient's request for therapy is turned down. Because compulsory health insurance funds and private health insurance companies pay differently, compulsory health insurance patients tend to have to wait longer for a therapy station than private health insurance patients.

4.6 Psychopharmaka

Administering psychopharmaka can make sense adjuvant to psychosomatic therapy methods, especially if patients suffer from strong feelings of anxiety and/or depression on top of their physical pain.

In acute, reactive grievances, the otolaryngologist can also prescribe this form of therapy, yet it should not go without an accompanying and supporting talk. A psychiatric concilliary examination is required for all serious psychological illnesses, for therapy resistance or for courses longer than three months.

Medicines suited for anxiety disorders are Benzodiazepines (for example Bromazepam, Lorazepam); the potential for addiction must be observed and patients must be informed of this. In the case of depressions, neuroleptics are recommended, whereby states of stress and agitation in particular should favour newer sedating Selective Serotonin Reuptake Inhibitors (SSRI) due to the low spectrum of side-effects [120]. The potential for addiction is neglectable.

5. Value of Inpatient Psychosomatic Treatment

For the following reasons, psychosomatically ill patients should first be treated as outpatients: for one, outpatient therapy costs are obviously lower than those for inpatient therapy. The other reason is that patients must deal with themselves, their social surroundings and their illness. If they want to regain their psychological health, they must be forced to adapt, habituate and develop coping strategies. And all of this must work at home and not simply in the safety of the clinic. This means that inpatient treatment of a psychosomatic illness can only be justified along the following circumstances [121]:

- if outpatient therapy has proved insufficient and if, at the same time, inpatient treatment expects to reach a therapeutic success;

- if the patient's psychological instability (in particular with accompanying anxiety disorders and depression with suicidal tendencies or personality disorders with severe psychological strain) is so pronounced that it necessitates tight monitoring and supervision;

- if grave psychosocial conflict situations (in particular in cases of violence or abuse in the family) make temporary distance from the family surroundings seem necessary.

Whether inpatient psychosomatic treatment (hospital treatment) or inpatient psychosomatic therapy or precautionary treatment (in the past known as "health resort treatment", now referred to as "medicinal rehabilitation measure", "rehabilitation treatment", "inpatient precautionary treatment") is necessary, depends on the severity of the illness and on the necessary intensity of supervision and monitoring.

6. Prognoses and Outlook: Psychosomatic Disorders

Prognosis of a psychosomatic disorder depends crucially on the duration of illness and on the number of already administered and mostly unsuccessful attempts at treatment. A psychiatric comorbidity such as anxiety or depression is mostly accompanied by an increased severity of the disorder and worse prognosis.

On the part of the patients, their resources, intellectual skills and their social environment are of decisive importance when developing suitable coping strategies for dealing with their illness.

On the part of the otolaryngologist, it is the organ medic's opportunity that many patients first come to them with organic complaints and psychosomatic disorders. This gives them the chance to help patients using a psychosomatic therapy approach and thereby avoid letting the troubles become chronic.

Early and successful treatment also helps avoid doctor-hopping and cost-intensive patient careers; an important aspect when considering the scarce resources at our health system's disposal.

As doctors, we should not forget that we are not randomly able to work under any pressure. Our occupational situation today is filled with all manner of regulations and constraints. To avoid burnout syndrome we need success stories. Successfully dealing with these sometimes difficult patients has an incredibly positive effect on our medical self-esteem and prevents frustration.

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