



Obstacles to Dental Healing

Part IV

The Need to Recognise Functional Disturbances, Especially Prior to Treatment with Protheses and other Restorations

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The orognathic system is one which may prematurely suffer substantial damage, destruction or amputation. If milk teeth are lost and no space-maintainer is fitted, back teeth migrate towards the facial midline via “mesial escape“[1]; in so doing they restrict the available space for the eruption of the remaining teeth to such an extent that often these are no longer able to come through in their regular position.

Remaining teeth may be lost prematurely. If a replacement is carried out too late or not at all, then local disturbances of function may occur because of dynamic changes in position.

The temporo-mandibular joint and the first molars adjust to each other in the sixth year of life. This positioning plays a formative part in the rest of one’s life. This explains possible functional disturbances arising from premature loss of teeth. Later orthodontic positional changes in the teeth should also be seen and considered in this light.

The temporo-mandibular joint is **not** a hinge joint. The upper and lower jaws have no bony connection to each other; it is only muscles, tendons and ligaments which define the relative position of the two jaws. The precise positioning of the two is determined by the biting surfaces of the teeth. Should these have been lost and/or replaced by prostheses or fillings, the two jaws take up a “compromise position“, for the supreme commandment of the central nervous system is: “Every tooth must have at least one point of contact with its opposite number.“

This represents the minimum requirement for the positioning of

the lower jaw and the statics of the spine.

Several facts towards a better understanding of the organs of mastication are as follows:

1. An acupuncture meridian (energy pathway) passes through each tooth.
2. Each tooth is served by the Trigeminal nerve, which forms nerve connections in front of the brain (collaterals) and has branches connecting it to each of the other cranial nerves.
3. Dentine is connective tissue, and this has a seamless connection with the autonomic nervous system (regulatory connection).
4. The teeth constitute the fine adjustment and stabilisation of the spine (orthopaedic connection).

These four facts explain the significance of the masticatory system for human beings, and the accumulation of disruptive fields (about 80%) in the cranial and jaw areas (including the tonsils). For this reason it is extraordinarily important, in everybody’s interest (patients’ and practitioners’), to try to achieve and maintain freedom from infective foci in this region.

Teeth are not only important “tools“ for the mastication of food; they form part of an important organic system, whose uses include inter alia communication (smiling, baring one’s teeth...), and the first social

[1] *Mesial escape* means the constant movement of teeth from the back of the jaw towards the centre, if they can find a space or a gap further forward. This is a lifelong process and leads in the first place to anterior occlusion, and later to considerable functional disturbances.

contact with the mother (breast-feeding). Teeth may certainly be composed of the hardest substance that the body can produce; however, their sensitivity is measured in tenths of a millimeter, and can even detect the slightest impurities in our food. However, this sensitivity is very individualised. Which of us is not familiar with the situation where several people are sitting around a table eating green salad? One of them finds sand in it, but the others do not. Everyone’s salad contains an equal amount of sand, but each person’s threshold of perception is very specific to them.

This varying degree of sensitivity can have considerable consequences in the event of fillings or prosthetic replacement. If, for instance, there is an imperfect contact between upper and lower teeth, a sensitive patient can become aware of this very rapidly and inform the dentist. However, if the discomfort from the imperfection is below that person’s individual perception threshold, then this contact will not be registered consciously, but will only be perceived on the subconscious level. Since the subconscious cannot be aware of the fact that a substantial change has taken place in the state of contact between upper and lower teeth because of a lost tooth, changes in position or dental prosthetics, attempts will be made by clenching and grinding the teeth to eliminate this source of annoyance by the easiest route.

The masticatory muscles will continue their efforts to eliminate these obstacles throughout the day, and that means that even during the



night the patient will have no respite, since the muscles are constantly subject to nervous stimulation. As a result, the patient is deprived of the deep phases of sleep, and the blood is insufficiently oxygenated, and this also shows up on an EEG when the patient is at rest. The patient wakes feeling unrefreshed and “whacked“. It seems to him that he had only just lain down and has had no sleep at all. There are numerous consequences: tension in the musculature, headaches, fatigue, a decline in performance, difficulty in maintaining concentration, irritability, tinnitus, rotatory vertigo, pain in the facial nerves, circumscribed numbness, pain in the back and neck, as well as other problems.

This incomplete little list of complaints should serve to indicate the extent of the changes that can occur over a short time-scale. For this reason, provision of a prosthesis is not recommended for someone in this state. The deviations from the normal state should first be communicated and eliminated. The lower teeth should be able to meet the upper teeth with no functional obstructions.

The extent of preliminary treatment is always individual, like patients themselves. Nor is it possible to determine without further investigation whether and to what extent damage has already occurred to structures (such as the cartilage of the temporo-mandibular joint) and, if so, what might be the consequences.

Before and during treatment it has proved most efficacious to prescribe, on the one hand,

ALKALAN powder (1 tsp. in hot water, to be taken in the morning on an empty stomach) and, on the other hand, MUCOKEHL 5X drops (one drop to be massaged into the temporo-mandibular joint on both left and right sides in the morning and the evening). If the masticatory musculature is in painful spasm, then additionally SANUVIS ointment should be rubbed into the masseter muscle (lateral masticatory muscle), in the morning, and again in the afternoon.

Patients are well advised not to rush into a decision to have permanent tooth replacement carried out. Of course the diagnoses and stages of these preliminary treatments are more expensive in terms of time and money than would be the case if replacement were carried out immediately. However, for the reasons given above, such an investment is clearly beneficial in the interests of receiving the best possible biological replacement in due course, with a good long-term prognosis. From this point of view, we also need to take a critical look at the recent phenomenon of “medical tourism“. For the lack of available time involved in the brief time-scale of e.g. a holiday means that the necessary preliminary treatment is totally impracticable. We are seeing a build-up of more and more cases, in which what was thought to be the “cheaper“ replacement option later turns out to be very much more expensive, with errors and omissions even becoming irretrievable.

In the case of new provisions or reconstructions with tooth replacement it is important to have an awareness and to take account

of the many links that exist between the orognathic system and the rest of the body. Otherwise the patient will (possibly!) be able to chew again, but the overall state of health will not be improved, and may frequently even deteriorate. As well as that, there is another factor to be taken into consideration. Quite frequently it is only months or years later that a patient becomes aware of complaints arising from tooth replacements with an imprecise fit. It often happens that the patient does not make the chronological association between these and the dental treatment, because this may have taken place as long as several years before. It is like the famous barrel which starts to overflow when one more drop is added. Viewed in isolation, this drop is often banal, but its effects can be devastating.

A good tooth replacement, suited to the patient and - above all - biological, is not an “off the peg“ affair. Only an exceptional team of dental practice and laboratory can ensure that the patient receives the best possible result. The members of this team must have above-average qualifications and training, so that the replacement possesses the qualities which the patient requires for a true reconstruction.

The dangers of false economies must not be trivialised. One should not economise where one’s health is concerned. Every patient, every administrator and every politician should always have that in mind.

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is today's export slogan. Whole university departments are being head-hunted by other countries. Waiting lists for treatment are on the agenda, and not only in the former East German states. How much longer can we (and are we prepared to) stand by and watch while our outstanding German medical care network goes on being destroyed? Of course good medical care costs good money. But health cannot be managed economically from a bureaucratic ivory tower, because it is unique, priceless and the measure of all things. Without good health there is no productivity,

without productivity there is no job. Without a job, not only is the economy running at a loss, but one's self-esteem and emotions also suffer. Does it therefore make sense to economise on health?

This question leads on to the topic which will be discussed in Part V - that of chronic headaches.

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