

Klinikum der Universität Köln
Klinik und Poliklinik für Hals-Nase-Ohren-Heilkunde

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TESTIMONIAL REPORT

The Novafon SK1 has been used for many years in our E.N.T clinic at the University Hospital Cologne, and that predominantly in the treatment of our adult patients.

Specific fields of application include:

- treating patients following operations to remove tumours in the head and neck region, and after dissecting the neck (extraction of the lymph nodes) especially laryngectomies.
- treating patients diagnosed with functional dysphonia (voice impediments)

This group of patients usually exhibits hypertonicity in the shoulders, in the upper back, in the entire region of the neck, as well as in the floor of the mouth and occasionally in the muscles of mastication. The Novafon instrument helps to ease the muscle, and contributes towards an optimal muscle tonicity throughout the entire body.

The following case report is divided into two separate groups of patients:

a) Following operations to remove tumours in the head and neck region:

Depending on the type of the neck dissection undertaken, it is necessary, amongst others, to remove the sternocleidomastoid muscle and to sever the accessory nerve intraoperatively. The resulting consequence of this procedure is a clearly apparent reduction of movement in the arm of the affected side (shoulder-arm syndrome), which, in turn, triggers a protective posture in the entire back. In addition, there are cicatrizations in the area operated upon. These can be made worse by subsequent radiation therapy. As a rule, in voice therapy one tries to regulate such occurrences, as they tend to have a negative effect upon respiration and, thus, upon phonation.

Therefore, the best possible regulation the tonicity of the entire body as well as an improvement in posture are determining factors in the success of logopedic treatment.

b) Patients with functional dysphonia:

Functional dysphonia occurs due to an imbalance of muscle tone in the neck and, above all, in the larynx region. This is often due to a primary muscular hypotonia at the level of the glottis, which is compensated for by unphysiological hyperactivity in the surrounding muscles. Additionally, there is often an altered respiration during speech as well as a compensatory posture. In such cases, the regulation of the entire body's tonicity is of significant importance.

The Novafon SK1 is a helpful instrument in the logopedic treatment of both of these groups of patients. It is employed in training sensitivity, in improving muscle tone, in widening the costal breathing space as well as improving costal-abdominal respiration.

When working on larger areas such as on the back (trapezius muscle and the surrounding muscle groups), we use the flat tool (sonic plate).

For muscular tension in the region of the floor of the mouth, in the anterior of the neck and around the larynx, we opt for the spherical tool (sonic ball). This allows precise work on small and delicate muscles located in sensitive, uneven and clearly defined areas.

Patient subjectivity:

Most patients find treatment of the neck and shoulder area, as well as of the entire back using the Novafon, as very pleasant. Relief occurs after only approximately 5 minutes. Patients speak of a tingling feeling as well as of a radiating heat in the area being treated. Care should be taken to omit all areas that display a thin covering of flesh over the bone. Otherwise, it is possible that – according to patients – an unpleasant drone and vibration can be felt right up to the skull due to the transmission of sonic waves via the bone.

Contraindications :

Patients with a primarily more hypotonic basic tension or also with low blood pressure, the use of the Novafon device may trigger circulation problems and dizziness.

During radiation treatment in the E.N.T. region, and several weeks afterwards, the radiated area should most definitely be left alone due to any existing mucositis. Also,

care is advised when using the Novafon on the lateral neck muscles of patients diagnosed with atherosclerotic variations of the carotid artery.

Summary:

The Novafon has proved to be an enrichment in the treatment of our patients. We use it predominantly at the start of each treatment session so that we reach the ideal muscular conditions necessary for the subsequent voice and swallowing exercises, as well as to be able to direct patient awareness to parts of the body deemed important in subsequent treatment.

Warm regards

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