Introduction to the Silensor-sl Anti-Snoring Device

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In this article, we will introduce the new Silensor-sl anti-snoring device. Future articles will further describe the clinical and laboratory procedures involved.

An evolution from the previous Silensor (Silent Nite) appliance, the new Silensor-sl features quicker, easier production, simple exchange of the connecting parts and less mechanical stress for the device as well as enhancing patient comfort (and compliance).

Snoring and obstructive sleep apnea are a mechanical process that can be counteracted mechanically. Here the dental therapy comes into action.

Many studies have shown the effectiveness of mandibular advancement splints, including the very comfortable Silensor-sl. The expansion of the pharyngeal area provided by these appliances reduces the tendency for collapse and improves the AHI by up to 50%. The reduction in airflow speed can improve snoring by up to 80%.

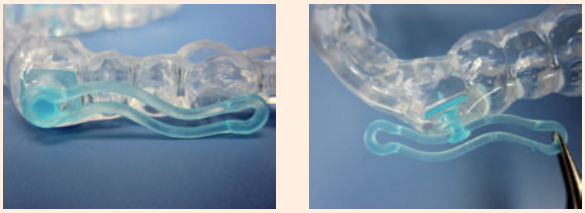
The new Silensor-sl is a mandibular advancement splint (MAS) that features:

- *Adjustable advancement;*
- *High level of comfort;*
- *Effective improvement of the symptoms; and*
- *Metal-free construction.*

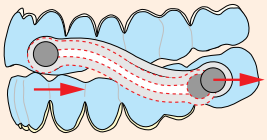
Further features

1. The upper splint of the Silensor-sl can be made from the very comfortable double layer material Erkoloc-pro/-blu 3.0 mm (shown) or from Erkodur 2.0 mm, transparent or in tooth colour.

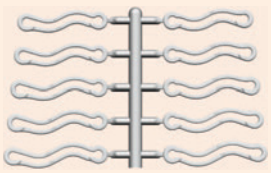
2. The lower splint of the Silensor-sl has to stay firmly in place, only if enough retention is available the lower splint can be made from the double layer material Erkoloc-pro/-blu 3.0 mm. Otherwise from Erkodur 2.0 mm, transparent (shown) or in tooth colour.



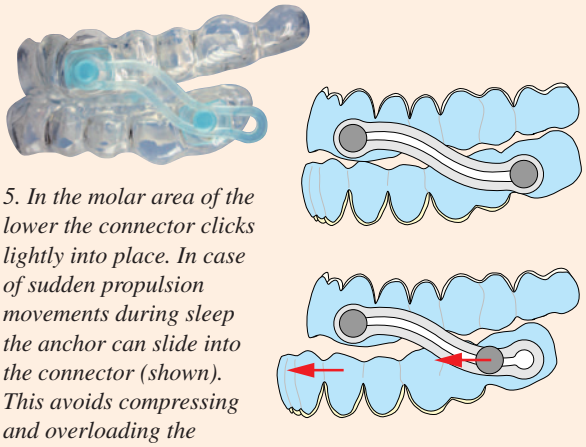
3. Connectors are easily exchangeable. Hang the connector with its long slot into the anchor and pull into the end position .



4. A light flexing of the double-S shaped connectors improves the wearing comfort and reduces load in the connecting area of all parts.

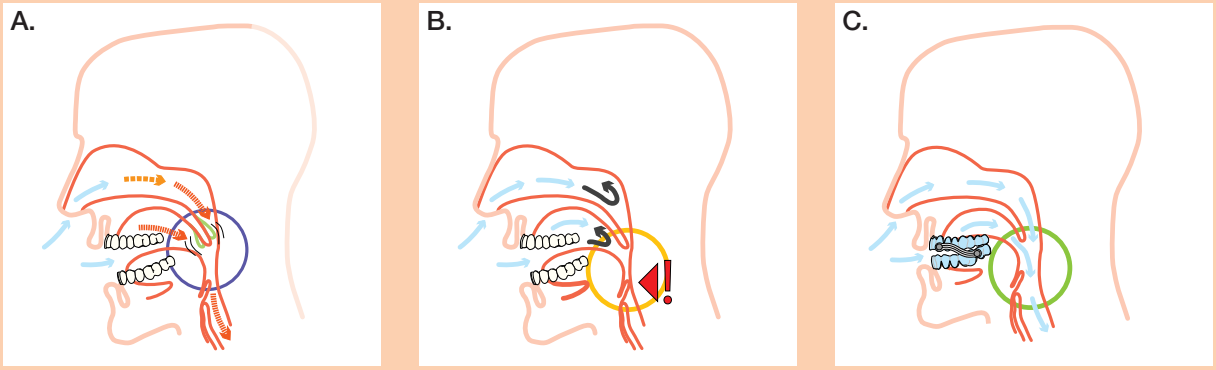


In case of a need for a different position of the lower, the connectors can be changed very easily. Five different sizes are provided.



5. In the molar area of the lower the connector clicks lightly into place. In case of sudden propulsion movements during sleep the anchor can slide into the connector (shown). This avoids compressing and overloading the connectors.

Snoring/Apnea Basics



A. Snoring is generated in the area of the upper respiratory system. Caused by acceleration of the air flow when the respiratory tract (pharynx) is cramped, parts of the soft tissue start to vibrate and cause the snoring noise.
B. Apnea is a total respiratory stop. The obstructive apnea is a mechanical relocation of the respiratory tract. In case of a central apnea the central respiratory reflex fails. The hypopnea is a reduction of the air flow of more than 50%.
C. The apnea/hypopnea index or AHI is the degree of severity of the problem. An apnea / hypopnea lasts at least 10 sec. To determine the index, the number of apneas is divided by the hours of sleep. An index of 0 to 5 is normal, an index of 5 to 10 is classed as light, 10 to 20 middle and more than 20 severe. An obstructive apnea is characterized by an interruption of the very noisy breathing/snoring. This diagram shows the influence of the Silensor-sl in situ).

About the author

Peter Herring is a dental technician, prosthetist and a regular contributor to eLABORATE. He is the Australasian and Indonesian distributor for Erkodent products and spends his time between offices in Perth and Bali. He also operates a busy Australian lab dedicated to thermoformed appliances. He can be contacted at pjh@erkodent.com.au or for general enquires within Australia please call 1800-242-634.