

TNI[®] 20- Nasal Insufflation

Product information



The TNI[®] 20 device is used to treat sleep-related breathing disorders and is a unique product on the world market. It is a much more comfortable alternative to the breathing therapy devices that are currently on the market.

Customer requirements

A considerable technical challenge was to design, develop and manufacture an "open system" which does not use a mask or nasal pillows.

seleon found a solution to the leakage problems that other devices commonly have. An additional challenge was to prevent the patient's nose from drying out. Maintaining a low noise level when the device is in operation was another limiting factor.

Results

seleon designed and manufactured the TNI[®]20 device, which consists of three components: a blower, a humidifier and an applicator.

The initial clinical tests were conducted on adults and children at Johns Hopkins University Hospital (JHU) in Baltimore (USA). For adults, the best results were obtained for patients with mild to moderate sleep-related breathing disorders. Additionally, some patients with severe breathing disorders were successfully treated.

For children, all tests conducted so far have proven to be effective and efficient in the therapy, so that no restrictions relative to the degree of severity were observed. Currently several studies are running on various applications of the TNI[®] in Germany and the USA.

Furthermore, acceptance studies found that even healthy test subjects fell asleep easily with the TNI[®]20 device and did not feel noticeably disturbed by the device. In addition, the warm, humid airflow was found to be comfortable.

Advantages

This treatment method is internationally patented.

High patient acceptance for the therapy was achieved largely due to TNI[®]20's unique applicator.

- Practically no resistance is felt when exhaling due to the device's "open system."
- Normal sleeping positions, such as sleeping on one's side or stomach can be maintained.
- There are no places where air can enter or escape due to mask slippage and therefore no leakage problems exist.
- The thin tube does not disturb the patient.
- The humidifier unit prevents the patient's nose from drying out.

Because it has a separate blower unit, the TNI[®]20 device operates very quietly.

TNI[®]20 is very easy and logical to operate and the pressure does not need to be manually set.

The TNI[®]20 device is easy to use and clean.

