TONGUE BACK ELASTIC TRACTION APPARATUS, HOLDING CLAMP, MOUNTING CLAMP, THREAD GUIDING APPARATUS, AND IMPLANTING METHOD

BACKGROUND OF THE INVENTION

Field of the Invention

The present invention relates to an elastic tongue-dorsum retraction device, clamping pliers, installation pliers, a line guide and an implantation method, and more particularly to an elastic tongue-dorsum retraction device for treating obstructive sleep apnea/hypopnea syndrome (Obstructive Sleep Apnea / Hypopnea Syndrome, OSAHS for short below), tools for use together therewith that include clamping pliers, installation pliers and a line guide, and an implantation method.

Related Art

Obstructive sleep apnea/hypopnea syndrome (OSAHS) is a sleep breathing disorder with clinical features of snoring, apnea and hypopnea caused by collapse and obstruction of soft tissues of the upper airway during sleep.

As for the pathogenesis of OSAHS, it is generally considered that multiple factors work together. Besides the narrow anatomical structure of the upper airway, the main cause is obstruction caused by soft tissue collapse that occurs when pharyngeal muscles for maintaining the upper airway open relax during sleep. The site of obstruction is usually located in the palatopharyngeal and glossopharyngeal planes.

Studies indicate that 20%-25% of OSAHS patients are caused by collapse in the palatopharyngeal plane only, 15%-20% of OSAHS patients are caused by collapse in the glossopharyngeal plane only, and 50%-70% of OSAHS patients suffer from collapse in both the palatopharyngeal and glossopharyngeal planes, that is, are mixed OSAHS patients.

To treat OSAHS caused by sagging and collapse of the tongue, the inventor disclosed an implanted tongue-root retraction device in Chinese Patent Application No. CN102198010 A. This invention has good clinical efficacy, and is particularly suitable for surgical treatment of moderate or severe OSAHS patients caused by collapse of the tongue root.

In addition, there are also various oral appliances for treating snoring and OSAHS in the

ELASTIC TONGUE-DORSUM RETRACTION DEVICE, CLAMPING PLIERS, INSTALLATION PLIERS, LINE GUIDE AND IMPLANTATION METHOD

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