



# OROPHARYNGEAL CLOGGING DISPOSABLE NO PNEUMATIC DEVICE

### **DESCRIPTION OF THE TECHNOLOGY**

In facial and oral interventions, frequently the procedure requires the nasotracheal intubation to allow pulmonary ventilation of the patient as well as oropharyngeal clogging to avoid the potential swallowing of salivary secretions, bleeding, liquid emissions or foreign bodies, as they could be potentially harmful. The conventional oropharyngeal clogging consists of introducing a gauze bandage moistened with a physiological saline solution. This procedure presents technical and healthcare problems, as it can produce side effects such as pharyngeal wounds, and can even threaten the patient's life by causing severe airway obstruction, in the event of forgetting its removal after the surgery.

The innovation presented in this invention allows a secure oropharynx clogging device, being it disposable and non-pneumatic. The device has been designed to fit the zone's anatomy and to be easily placeable there. Furthermore, it also adds a visual/warning element to warn about its presence, and eliminate the chance of forgetting it after the surgery.

## **APPLICATIONS**

The present invention provides a new device designed for clogging the respiratory and gastrointestinal tracts of a patient over a surgical intervention in the oral, maxillofacial or craniofacial area, where exists nasotracheal intubation.

# **ADVANTAGES AND BENEFITS**

The present invention targets an unmet clinical need for which there is no solution in the market. The benefits versus other actual devices are the following:

- Design adapted to the zone's anatomy, design to perfectly fit in the oropharynx walls. Therefore, not causing harm to the patient and preventing after-surgery pharyngeal wounds.
- Design configured to allow an easy introduction and installation.

- It also adds elements that warn about its presence avoiding the extubation of the patient with the device placed minimizing the surgery complications derived from forgetting its removal.
- It can also be modified with the addition of new smart-plastics and functionalized materials, which would allow the addition of sensors to measure e.g. the temperature of the patient, continuous pulse oximetry, heart rate, or connection to the anesthesia machine, using visual and sound alarms in the anesthesia monitor in the event of accidental and inadvertent removal of the device.

## STATE OF DEVELOPMENT

The invention is in functional prototype phase and it is currently being tested in corpses and training manikins.

## **INTELLECTUAL PROPERTY**

Spanish Patent application filed in 2019 with a positive written opinion in the preliminary search report.

#### **COLABORATION SOUGHT**

Companies in the field of anaesthesia/surgery devices willing to license the technology.