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RESPIRATORY ENDOSCOPY TECHNIQUES SIMULATION DEVICE

Available to license: device that allows the simulation of any respiratory endoscopy technique.

Researchers from the Cantabrian Health Service have developed a simulator that allows the training of specialists in any technique of respiratory endoscopy, through very realistic simulation.

Simulation device for respiratory endoscopy techniques

Synthetic cardiopulmonary block simulators do not allow for the training of certain endoscopic techniques. On the other hand, the use of cadavers or live animals is costly.

The simulation device for respiratory endoscopy techniques presented here allows for the practice of endoscopies on a cardiopulmonary block of animal origin without the need for the animal's body. It allows the use of actual organic tissue without the need to use live or deceased patients or animals.

The simulator consists of a box, a drainage tube, a tube, and a removable top cover. In the position of use, the box, formed by a lower bottom and side walls, includes a working chamber where the cardiopulmonary block (trachea and lungs) is fixed, and an aspiration chamber, separated by a breathable intermediate membrane.

Competitive advantages

The main competitive advantages of the device are:

- > Simple.
- Realistic. Avoiding in vivo experimentation.
- Versatile. Allows training in any endoscopic technique, in addition to simulating tumors or lesions.
- Flexible. Enables quick and easy change of the cardiopulmonary block.
- Cost-effective.

Supporting Data

A simulator has been designed, built, and validated that allows for the manipulation of an expanded cardiopulmonary block as if it were a real patient.

Market insight

This simulator is very useful in hospital units and training and simulation centres, such as virtual hospitals, for the training of pulmonology residents and other related professionals in the management of the cardiopulmonary block and the airways.

Patent Protection

This device has been protected as Utility Model granted by OEPM with Ref. **ES1312494U**. IDIVAL would like to talk to companies interested in its license and commercialization.



Researchers:

Diego Ferrer Pargada Félix Ortiz Portal

For further information please contact:
Nieves Martínez Murillo
Technology Transfer Office- IDIVAL
maria.martinez@idival.org
+34.942.31.55.15 Ext 075684
www.idival.org Santander, Spain