SCIENTIFIC EVIDENCE RELATED TO SINGLE-USE FLEXIBLE BRONCHOSCOPES

CLINICAL PERFORMANCE

In more than 90% of 300 procedures performed with single-use flexible bronchoscopes, all the pulmonary segments could be reached, and all the planned techniques could be performed, for a general level of satisfaction with the device of 86% and a recommendation for its use in similar cases. Further, they found a learning curve with excellent scores from the ninth procedure.

Flandes et al. (2020)

CONTAMINATION AND INFECTIONS

Bronchoscopy-related pseudo-outbreaks occur despite standardized procedures for high-level disinfection. Of a total of 35 patients who had a bronchoscopy with a reusable flexible bronchoscope, 10 (28.6%) tested positive for Adenovirus infection. New technology that is high-quality disposable or able to undergo sterilization is needed.

Seidelman et al. (2021)

ORGANISATIONAL IMPACT

Organisational impact should be considered when assessing medical devices. This study shows that, from an organisational viewpoint, there are many advantages in using single-use flexible bronchoscopes, including working conditions and safety, patient pathways, logistics, and training requirements.

Châteauvieux et al. (2018)

CLINICAL PERFORMANCE

Single-use flexible bronchoscopy allows for parallel as opposed to linear use in the respiratory suite, which can decrease delays between procedures and increase the number of bronchoscopies that can be performed.

Barron and Kennedy (2020)

ENVIRONMENTAL IMPACT

Using one set of personal protective equipment per reprocessing, along with the materials for cleaning and disinfection, determines that reusable flexible bronchoscopes have comparable or higher material and energy consumption, as well as higher emissions of CO_2 equivalents.

Sørensen et al. (2018)

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