Randomised controlled trial comparing the Ambu® aScope™2 with a conventional fibreoptic bronchoscope in orotracheal intubation of anaesthetised adult patients.

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Abstract

Fibreoptic intubation remains an essential skill for anaesthetists to master. In addition to the reusable fibrescope, an alternative disposable videoscope is available (aScope™2, Ambu®, Ballerup, Denmark). A total of 60 anaesthetised adult patients were randomised to either having orotracheal intubation using the aScope 2 or a Karl Storz fibrescope. Intubations were performed by experienced operators who were familiar with both devices. The primary outcome was the Global Rating Scale score. Secondary outcomes included intubation success, number of intubation attempts and intubation time. Other subjective outcomes including practicality, useability and image quality were also recorded. There was no significant difference in the Global Rating Scale score, intubation success or intubation time between the aScope 2 or Karl Storz fibrescope. Global Rating Scale scores were three and two in the aScope 2 and Karl Storz groups respectively (P=0.14). All of the other subjective outcomes were similar between the two groups, except that operators found it easier to use the aScope 2 compared to the fibrescope. There was no significant difference in clinical performance between the aScope 2 and the Karl Storz fibreoptic bronchoscope. The aScope's practicality, disposability and recently improved version (aScope™3) potentially make it an acceptable alternative to the reusable fibrescope.