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Comparison of the Glidescope Visualization and Neck Flexion with Lateral Neck Pressure Nasogastric Tube Insertion Techniques in Anaesthetized Patients: A Prospective Randomized Clinical Study

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Abstract : Nasogastric tube (NGT) insertion in anaesthetized and intubated patients can be challenging even for experienced anesthesiologists. Various techniques have been proposed to facilitate NGT insertion in these patients. This study aimed to compare the success rate and time required for NGT insertion between the GlideScope visualization and neck flexion with lateral neck pressure techniques. This randomized clinical trial was performed at a teaching hospital on 86 adult patients undergoing abdominal surgery under relaxant general anaesthesia who required intraoperative NGT insertion. The patients were randomized into two groups, the GlideScope group (group G) and the neck flexion with lateral neck pressure group (group F). The success rate of first and second attempts, duration of insertion, and complications were recorded. The total success rate was 79.1% in Group G compared with 76.7% in Group F (P=1) The median time required for NGT insertion was significantly longer in Group G, for both first and second attempts (97 vs 42 seconds P<0.001) and (70 vs 48.5 seconds P=0.015), respectively. Complications were reported in 23 patients (53.5%) in group G and 13 patients (30.2%) in group F. Bleeding and kinking were the most common complications in both techniques. Using GlideScope visualization to facilitate NGT insertion was comparable to neck flexion with lateral neck pressure technique in degree of success rate of insertion, while neck flexion with lateral neck pressure technique had fewer complications and was less time-consuming.

Keywords : anaesthesia, nasogastric tube, GlideScope, intubation
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