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Comparison of the C-MACw, Airtraq, and Macintosh laryngoscopes in patients undergoing tracheal intubation with cervical spine immobilization

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J. McElwain J. G. Laffey Clinical Sciences Institute, Galway University Hospitals, Ireland

This study aimed at comparing the performance of the C-MAC, Airtraq, and Macintosh laryngoscopes when performing tracheal intubation in patients undergoing neck immobilization using manual inline axial cervical spine stabilization.

Methods. Ninety consenting patients presenting for surgery requiring tracheal intubation were randomly assigned to undergo intubation using a C-MAC (n¼30), Airtraq (n¼29) or Macintosh (n¼31) laryngoscope. All patients were intubated by one anaesthetist experienced in the use of each laryngoscope.

Results. The Airtraq laryngoscope performed best in these patients, reducing the Intubation Difficulty Scale score, improving the Cormack and Lehane glottic view, and reducing the need for optimization manoeuvres, compared with both the Macintosh and the C-MAC.

Conclusions. The Airtraq laryngoscope performed better than the C-MAC and Macintosh laryngoscopes in patients undergoing cervical immobilization