

Experience of upper airway complications after anterior cervical spine surgery

Background.

Upper airway obstruction is a rare but potentially fatal complication after anterior cervical spine surgery.

Methods.

We investigated cases requiring reintubation for upper airway complications after anterior cervical spine surgery in our institutions from 2014 to 2022.

Results.

A total of 141 cases had anterior cervical spine surgery, and 5 cases required reintubation for postoperative upper airway complications. There were 3 cases of C3/4/5ACDF, 1 case of C6/7ACDF, and 1 case of C4/5/6/7ACDF. All patients were extubated on postoperative day 1, and the timing of reintubation was 3 patients on postoperative day 1, 1 patient on postoperative day 2, and 1 patient on postoperative day 4. The causes of reintubation were laryngeal edema in 2 cases, pharyngeal hematoma in 1 case, and pharyngeal edema in 1 case. The time from detection of the abnormality to reintubation ranged from 1 to 5 hours, but symptoms progressed rapidly within 1 hour in 2 cases of laryngeal edema. Reintubation was possible for all patients, and there were no cases of patient death.

Conclusion.

Five cases of upper airway complications after anterior cervical surgery required reintubation. Pathology of upper airway complications was variable, but symptoms progressed rapidly in cases of laryngeal edema.