Clinical Image

Complete Tracheal Resection in Closed Cervical Spine Injury

Sección traqueal completa por traumatismo cervical cerrado

Carmen María Rodríguez Gómez, Matilde Rubio Garay, Xavier Baldó Padró

Servicio de Cirugía Torácica, Hospital Josep Trueta, Girona, Spain

We report the case of a 17-year-old male patient with closed cervical spine injury due to a traffic accident, hemodynamically stable, with continuous desaturations requiring orotracheal intubation. Computed tomography performed in our hospital revealed complete cervical tracheal disruption with a 5 cm proximal to distal dehiscence, with the orotracheal tube located in the mediastinum (Fig. 1A and B). Given these findings, emergency surgery was performed, with anterior transverse cervicotomía and intrasternal intubation (Fig. 1C), and end-to-end tracheal anastomosis with unloading distal tracheotomy. The patient was extubated on the third day after surgery, and discharged 9 days after the intervention, with withdrawal of the tracheotomy tube and closure after confirmation of airway patency and adequate gastrointestinal ingestion. Six months later, dysphonia persisted due to paralysis of both vocal cords in the paramedian position.

Complete tracheal disruption caused by high impact closed cervical spine injuries is rare, occurring at an incidence of approximately 1%, but it is potentially fatal and requires immediate diagnosis and therapeutic intervention. Phonatory and respiratory function may be compromised by paresis or paralysis of the vocal cords caused by unilateral or bilateral avulsion of the recurrent nerve.

Acknowledgements

We thank Dr. Tobel of the ENT Department of the Hospital Josep Trueta for his help in the surgical intervention and subsequent follow-up of the patient.

References


Fig. 1. (A) Axial computed tomography (CT) slice. (B) Sagittal CT slice. (C) Surgical image with intraoperative distal intubation.