Madelung's Disease and Airway Management

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Madelung's disease, also known as benign symmetrical lipomatosis, familial symmetric lipomatosis, or Launois–Bensaude syndrome, is a rare disorder characterized by the presence of multiple, symmetrical, and nonencapsulated lipomas located in the neck, face, and upper trunk.¹ These fat masses cause significant deformity and cervical immobility. Airway management of these patients is challenging, and postoperative respiratory failure is a frequent complication.

The accompanying images show the preoperative physical examination of a man suffering from Madelung's disease who required urgent surgery for intestinal obstruction. The images reveal a significant macroglossia occluding the airway (Mallampati IV), as well as inability to mandibular protrusion and limitation of cervical mobility by a giant posterior cervical lipoma. As observed, the presence of anterior cervical lipomas makes it impossible to evaluate thyromental distance and tracheal orientation.

Macroglossia is very rare in patients suffering from Madelung's disease.¹ Its presence makes airway management an even greater challenge for anesthesiologists. The predictors of difficult airway in this patient make awake fiberoptic endotracheal intubation mandatory. Because of the presence of macroglossia and cervical lipomas that may compress the airway, sedation to facilitate fiberoptic endotracheal intubation must be carried out with caution to avoid oversedation and potential hypoventilation and hypoxia. Awake videolaryngoscopy could offer another option in the airway management of patients suffering from Madelung's disease.^{2,3} Nevertheless, the presence of macroglossia in these patients could make videolaryngoscopy even more complicated and, therefore, lead to a failure of airway management.

Competing Interests

The authors declare no competing interests.

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