A life Threatening Multiple Subglottic and Mediastinal Hemangioma In An Infant

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Conclusion

Subglottic and mediastinal infantile hemangioma can cause biphasic stridor, respiratory distress and even life-threatening airway compromise. Propranolol is an effective, non-invasive treatment of a life-threatening infantile hemangioma compressing the airway.

Introduction

Infantile hemangiomas (IHs) are the most common tumor of infancy. IHs are mostly cutaneously and subglottic hemangiomas (SGs) are associated in %50 of the cases with cutaneous hemangiomas. But SGs can cause life-threatening airway compromise. We present the case of an infant with a subglottic and mediastinal hemangioma treated with oral propranolol succesfully.

Case Report

A 2-month-old female was referred to our department for a biphasic stridor and respiratory distress. No evidence of cutaneous hemangioma was found with a physical examination. We performed direct laryngoscopy and tracheoscopy under general anestesia with spontaneous ventilation. The tracheoscopy showed a large subglottic hemangioma and more than 4 hemangiomas on the trachea wall with an 90% stenosis. Because she was symptomatic, we started to propranolol treatment 1 mg/kg. Resolution of symptoms within 72 hours of administration of the first dose of propranolol. She was discharged home receiving 2 mg/kg divided twice a day without stridor. One month later the control tracheoscopy was performed but there were no reduction of hemangioma’s size. Computed tomography (CT) with contrast of the neck and chest was obtained postoperatively. It suggested a large intra-thoracic hemangioma compressing the airway, extending into the mediastinum. Because of being asymptomatic the systemic propranolol treatment was continued and no additional treatment was given.

Discussion

Although IHs are benign tumors, SGs are potentially life threatening because of obstruction of the airway during the proliferative phase.

In our case with the systemic propranolol treatment symptoms improved although there was minimal changing in tracheoscopy findings. Before treatment CT was not obtained, therefore we could not determine the change of mediastinal hemangioma’s size with propranolol treatment. The improvement of the symptoms may be due to the reduction of the mass in the mediastinum.

In the first tracheoscopic examination the lesion were evaluated as multiple subglottic and tracheal hemangiomas, but than we realized that the findings were caused by tracheal compression. For this reason if subglottic hemangiomas are noticed, Mediastinum must be observed with CT or Magnetic Resonance Imaging with contrast.