Abstract
The larynx and the remaining components of the upper aerodigestive tract collectively play an important role in undertaking respiration, phonation, and deglutition. Therefore, a variety of pathologies can present with similar symptoms. Systemic diseases, such as rheumatoid arthritis and relapsing polychondritis, may also manifest with laryngeal symptoms and findings, whereas rare pathologies may present with vague presentations. Such scenarios may be attributed to the consequent medical confusion and dilemma in reaching an accurate diagnosis. In this case report, an 11-year-old male presented with airway compromise symptoms, which were later identified and diagnosed as laryngeal embryonal rhabdomyosarcoma.

Introduction
Rhabdomyosarcoma is a malignant mesenchymal neoplasm and the most commonly observed soft tissue sarcoma in the children and adolescent age groups. The tumor often resembles the muscle cells found in 7- to 10-day-old embryos. The four principal histological variants of rhabdomyosarcoma consist of embryonal, alveolar, pleomorphic, and botryoid, whereby, in general, the embryonal and pleomorphic subtypes occur in the younger and older population, respectively [1,2]. Their clinical presentation may be distinguished from other laryngeal malignancies, in which some may present with subtle clinical signs. Similar instances are also seen in autoimmune diseases, which may underlie indistinguishable presentation but can be diagnostically supported and proven using certain benchmark antibodies, such as antinuclear antibodies (ANA).

Case Presentation
We describe a case of an 11-year-old male with underlying allergic rhinitis, who initially presented with an acute episode of cough and shortness of breath. During the first presentation, he was treated as a case of acute exacerbation of asthma and admitted to the intensive unit care (ICU) for noninvasive ventilation support. However, no intubation was needed during that episode. Upon his discharge, he continued to complain of coughing at home but did not have any nocturnal or exercise- or cold-induced acute exacerbation of asthma. About two months later, he developed another episode of shortness of breath, but there was no history of fever, sore throat, or other symptoms of inflammation. During the assessment, he was noted to be in respiratory distress with severe tachypnea. The attending physician faced severe difficulty during intubation. Subsequent video laryngoscopy revealed severe upper airway obstruction at the subglottic region, which led to the diagnosis of severe subglottic stenosis.

He underwent emergency tracheostomy with further investigation via computed tomography (CT) scan that showed severe stenosis at the subglottic area encompassing approximately a 4-cm segment. Right after stabilization, he was referred to our team for further management. Without delay, direct laryngoscopy was done under general anesthesia, which showed generalized edema of the larynx and trachea with an indurated swelling involving the arytenoids and posterior commissure (Figure 1). The subglottic region appeared collapsed and edematous with the tracheal ring poorly identified due to the localized edema (Figure 2).
FIGURE 1: Endoscopic image captured intraoperatively showing a swelling over the posterior commissure extending inferiorly to the subglottic region (white arrow).
FIGURE 2: Endoscopic image captured intraoperatively showing the subglottic region that was edematous and collapsed (white arrow).

Local corticosteroid injection was administered during the procedure. The postoperative provisional diagnosis was relapsing polychondritis. Tapering doses of oral steroids were thereby prescribed to the patient.

Upon the completion of the oral steroid dosage, a direct laryngoscopy procedure was repeated, and the findings remained unchanged. Biopsy taken during the second intervention remained inconclusive as it merely displayed atypical stromal cells with extensive crushed artifacts. A concomitant autoimmune screening was done, indicating positive ANA and high values of erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP). The case was comanaged by the pediatric team, whereby their expert opinion ruled out the diagnosis of relapsing polychondritis. Instead, the child was treated for granulomatosis with polyangiitis, which is a systemic necrotizing vasculitis. The extractable nuclear antigen (ENA) test was found to be negative, thereby necessitating further referral to the pediatric rheumatology team in another tertiary center. However, the patient did not show improvements despite optimal immunosuppressant treatment.

Due to the nonresponsive nature of the condition, a third direct laryngoscopy and examination under anesthesia were performed. The repeated biopsy taken from the mass was confirmed to be an embryonal rhabdomyosarcoma. Meanwhile, CT scan and magnetic resonance imaging (MRI) of the neck done collectively displayed a heterogeneous mass seen in the neck, which extended into the trachea and retrosternal region, causing complete obstruction. The child was then referred to another tertiary center with oncology specialty.

**Discussion**

Rhabdomyosarcomas are rarely found in the larynx, in which most of the cases of head and neck rhabdomyosarcomas occur in the orbit, nasopharynx, and nose [2,3]. A particular study undertaken over a period of 20 years reported that children presenting with head and neck rhabdomyosarcomas have a mean age of 5.3 years and a median age of four years. A male predilection is evident, with a male/female ratio of 1.7:1. The primary tumor sites and percentages are as follows: face/non-orbital sites, 18%; orbit/periorbital,
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