

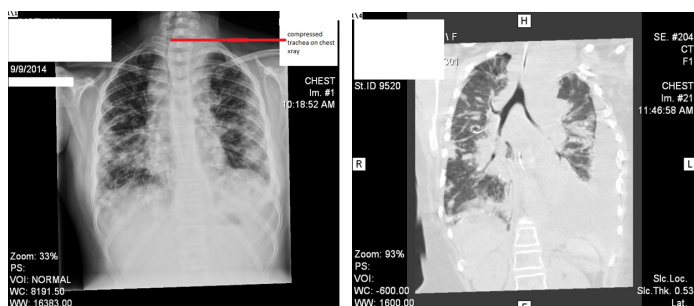
Embryonic Metastatic Rhabdomyosarcoma Compressing the Trachea

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Sir,

Eleven year old girl presented to the intensive care unit, Krishna institute of medical sciences Hyderabad in September 2014 with shortness of breath, tachypnea, tachycardia. History revealed rhabdomyosarcoma for which chemotherapy was taken and symptom free period of one year followed by the present complaint. History of progressive dysphagia to liquids and solids for one month was given by parents. On auscultation of the chest, bilateral crepitations were heard. Arterial Blood Gas analysis revealed severe hypoxemia, hypocarbia. Furosemide was given, followed by nebulisation and Noninvasive ventilation BiPAP was instituted.

Chest X-ray [Table/Fig-1] revealed severe narrowing of the trachea due to nodal compression. Endoscopy revealed submucosal bulge from posterior pharyngeal wall (left side). Computerised tomographic scan of chest [Table/Fig-2] revealed severe narrowing of the trachea. Airway examination revealed Mallampati class 4 [1]. Emergency endotracheal intubation was done in the operating room to save her from hypoxic injury and supported with ventilator. Palliative radiation



[Table/Fig-1]: Chest X-ray showing compression of trachea

[Table/Fig-2]: Computerised tomographic scan of chest showing narrowing of trachea

was started to relieve compression. Significant pleural effusion was detected which were drained periodically mean while. Pancytopenia due to marrow infiltration was suspected as disease surfaced at several places in the lung and liver. After seven days, she developed hypotension and remained unresponsive to vasopressor which led to cardiorespiratory arrest.

DISCUSSION

Endotracheal intubation with tracheal deviation/compression is a challenging task. Here, we like readers to think about the possibility of metastasis in a cancer patient which makes it a difficult airway as in our case. We would like to emphasise the various methods available in securing airway with least complication.

In our patient, we tried inhalation induction with Sevoflurane in the operating room under direct laryngoscopy. Vocal cords were visualised and 5.5mm endotracheal tube was passed with slight resistance. Awake fibreoptic intubation is accepted as gold standard for intubation in anticipated difficult airway and should be considered as an early option in patients with tracheal deviation or compression [2]. We tried inhalation induction with Sevoflurane as the patient is 11-year-old and not so cooperative for awake intubation. If we were unsuccessful, we had a backup plan of awake fibreoptic intubation. Tracheal/ airway stents can also be used with the advantage of being less invasive and requires less hospitalisation. Metal and silicone are the two main types of stents available both in covered and uncovered varieties. Covered variety stents prevent tumour ingrowth [3]. We ruled out the possibility of stents in our patient due to her poor prognosis and high cost of stent. Tracheostomy could have been considered if it's only a proximal airway obstruction. CT scan revealed obstruction both at proximal and distal level which ruled out the possibility [4].

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