Cardiac and respiratory arrest following removal of tracheostomy tube

Sir,

In this report we describe a case of 53-year-old female who is admitted electively for removal of the tracheostomy tube. The tracheostomy tube was present for the last 5 months when the patient had Lithium toxicity and renal failure which required prolonged tracheal intubation and lung ventilation followed by tracheostomy. The patient was then discharged home for further follow up in the outpatient clinic. The patient was admitted this time to the general thoracic ward to be assessed for the removal of this tracheostomy tube. The patient underwent a CT of the nasopharynx and the upper airway and it was reported as focal narrowing mainly in coronal caliber of the trachea where it has been compressed by an adjacent large left thyroid lobe and nodule. The trachea was also pushed toward the right side. No other focal stenosis or tracheal thickening or nodule or masses was found. The tracheostomy tube was closed for about 24 h since the admission and the patient remained stable hemodynamically, with good oxygen saturation on room air and she was not distress, so the tracheostomy tube was removed.

The patient remained in a good condition and clinically stable for 2 h, then the patient deteriorated suddenly, became cyanotic with gasping respiration along with desaturation and bradycardia. She was coded and resuscitated by the cardiac arrest team as she required "after few attempts to pass tracheostomy tube which was unsuccessful." An endotracheal intubation and one dose of adrenalin 1 mg i.v. were given with successful outcome. Later after she was stabilized the tracheal tube was removed and tracheostomy tube size 6 was inserted. The patient regained full consciousness and she remained stable. Portable chest X-ray in the ward was requested as routine practice [Figure 1].

Next morning she underwent another assessment of the upper airways by fiber-optic and rigid bronchoscopy under general anesthesia. During this procedure, a foreign body (FB) was found in the right main bronchus reaching mid of the trachea which was a large piece of folded plastic suction catheter, however, this FB was removed successfully [Figure 2]. The rest of the bronchoscopy examination was within the normal findings and there was no stricture or tracheomalacia.

Tracheostomy tube size 7 reinserted again at the end of the procedure. The most probable explanation of this

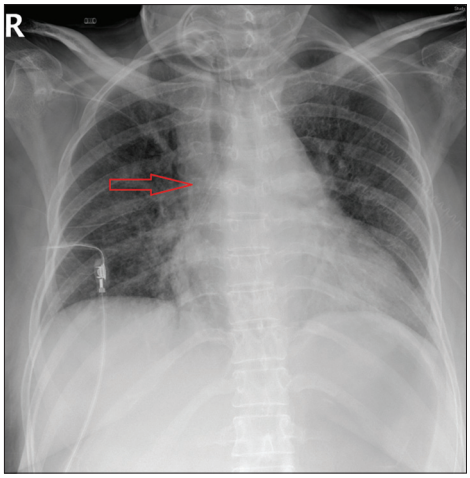

Figure 1: Chest X-ray showing the foreign body in the lower trachea and the right main bronchus where the red arrow is pointing

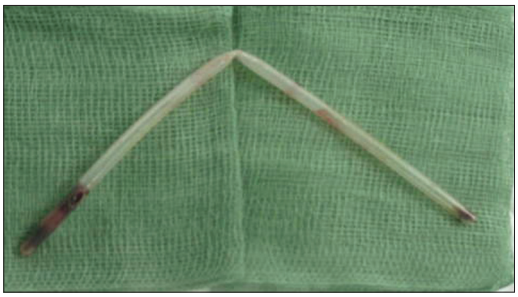

Figure 2: Folded plastic suction catheter which was removed from the major airway during the rigid bronchoscopey

FB which was found in the major airways is this suction catheter inserted during the resuscitation period when the patient coded, as it was not present in the CT scan or the previous chest X-ray but only in the X-ray after this event which was overlooked. Post-operatively the patient remained in the ward in a good and stable condition, and she was referred to the ENT surgeon for further evaluation.

We conclude and recommend from this report that during any resuscitation events everyone involved from the team should remain calm and in control and not to rush to any unnecessary maneuvers or to a panic phase, as what happened in our case report which explains the insertion of this piece of suction catheter in the upper airway and left behind there during the establishment of the airway and resuscitation. Also, the chest X-ray which is requested routinely post-event should be studied very carefully and thoroughly.

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Access this article online

Quick Response Code:

Website:
www.saudija.org

DOI:
10.4103/1658-354X.82822