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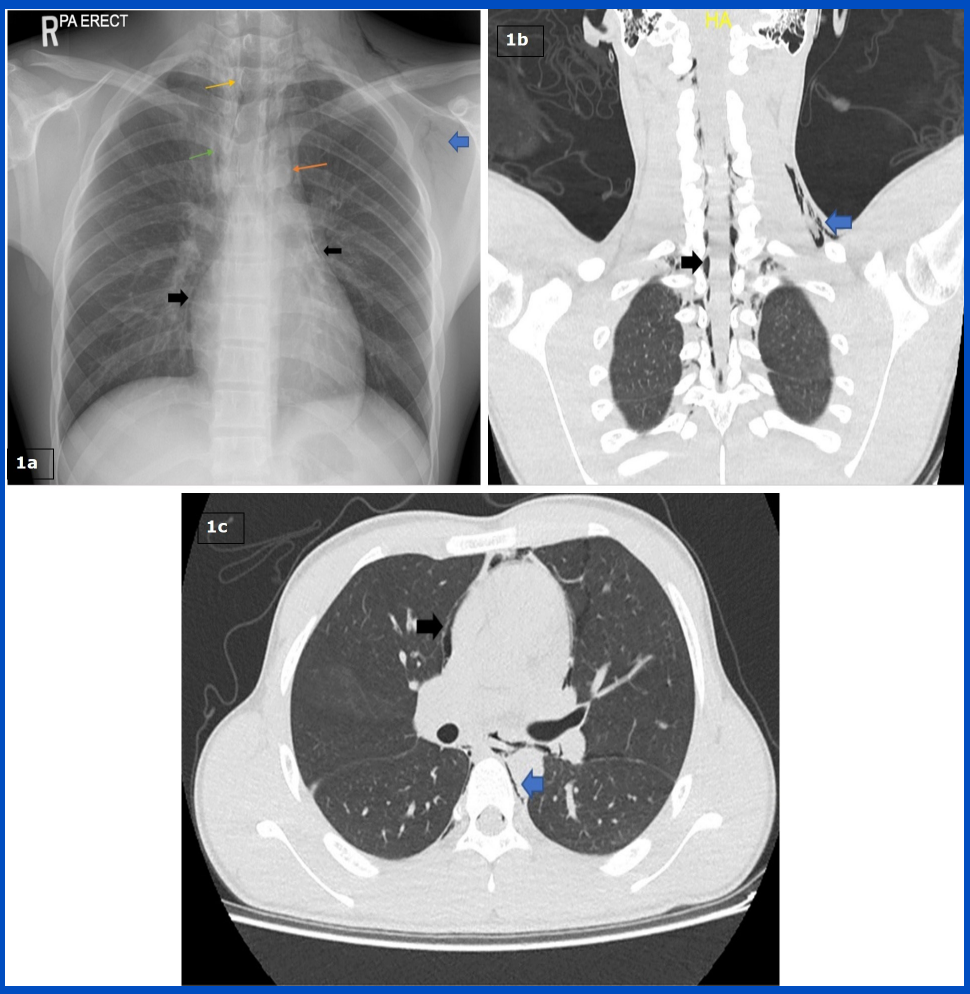

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The Brunei International Medical Journal (BIMJ) is a six monthly peer reviewed official publication of the Ministry of Health under the auspices of the Clinical Research Unit, Ministry of Health, Brunei Darussalam.

The BIMJ publishes articles ranging from original research papers, review articles, medical practice papers, special reports, audits, case reports, images of interest, education and technical/innovation papers, editorials, commentaries and letters to the Editor. Topics of interest include all subjects that relate to clinical practice and research in all branches of medicine, basic and clinical including topics related to allied health care fields. The BIMJ welcomes manuscripts from contributors, but usually solicits reviews articles and special reports. Proposals for review papers can be sent to the Managing Editor directly. Please refer to the contact information of the Editorial Office.

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This section usually consist of invited reports that have significant impact on healthcare practice and usually cover disease outbreaks, management guidelines or policy statement paper.

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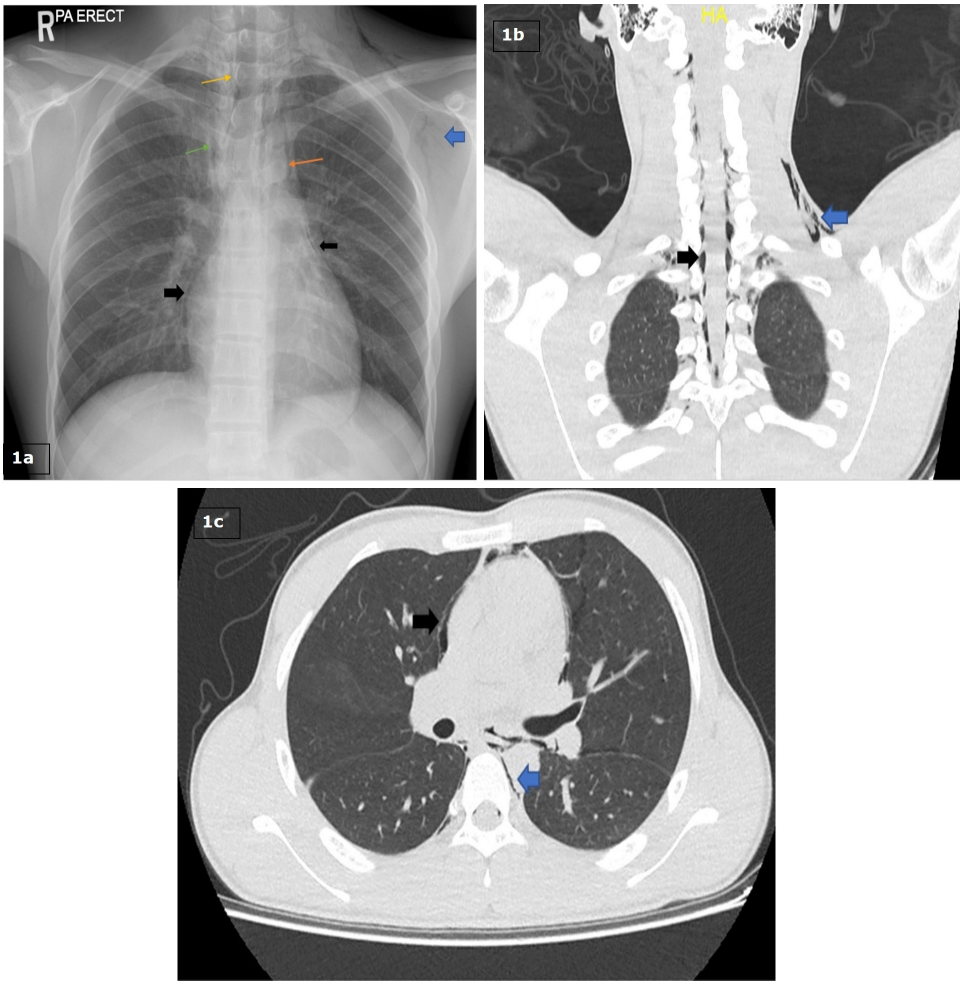

A 15-years-old boy with underlying bronchial asthma presented with acute shortness of breath, cough and pleuritic chest pain during sports on a school day. His shortness of breath and pleuritic chest pain progressively worsened and was associated with neck pain. Salbutamol administration inhaler provided transient relief; however, recurred after an hour. No history of trauma was noted. In general, his asthma is fairly well controlled with salbutamol inhaler with no previous hospital admissions. Clinical examination of the neck revealed crepitus over the anterior and posterior cervical region of the neck, which is extending to both supraclavicular regions. On auscultation there was generalised inspiratory rhonchi bilaterally. Chest radiograph and computed tomography are shown as above (Figure 1a,b,c)

What is the diagnosis?

***Answer**: refer to page 101*

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DISCLOSURE: There is no conflict of interest and consent has been obtained from parents for use of these images.

(Refer to page 100)

ANSWER: SPONTANEOUS PNEUMOMEDIASTINUM ASSOCIATED WITH PNEUMORRHACHIS

Chest radiograph (Figure 1a) shows extension of air pockets in the superior mediastinum, lining both the paraspinal (green arrow), paratracheal (yellow arrow), aortic pulmonary stripe and retroaortic regions (orange arrow) suggestive of pneumomediastinum. There is extension of air lining both left and right heart border within the pericardium as well causing pneumopericardium. (black arrowhead) Subcutaneous emphysema in the left axillary fossa and supraclavicular region. (blue arrowhead). Coronal CT cervicothoracic spine in lung setting (Figure 1b) showing air tracking along the spinal cord and exiting nerve roots suggestive of pneumorrhachis. (black arrowhead) Associated with subcutaneous emphysema as well (blue arrowhead). Axial CT thorax in lung setting (Figure 1c) showing pneumomediastinum surrounding the descending thoracic aorta and esophagus. (blue arrowhead) There is associated pneumopericardium as well. (black arrowhead)

Spontaneous pneumomediastium complicated with pneumorrhachis is a rare radiographic occurrence in childhood.[1] Pneumomediastinum is defined as presence of air within the mediastinum[1] and pneumorrhachis refers to as presence of free air within epidural space encircling the spinal cord.[2] There are numerous synonyms namely intraspinal air, intraspinal pneumocoele, spinal epidural and subarachnoid pneumatosis, spinal and epidural emphysema, aerorachia, pneumosaccus, air myelogram, pneumomyelogram or pneumomyelography.[2]

Lucent streak of air lining the mediastinum confirms the diagnosis of pneumomediastinum on chest radiograph with typical presentation of chest pain along with Hamman's sign on heart auscultation.[3]

Diagnosis of pneumorrhachis is based on radiograph and computed tomography. Radiographs are helpful for initial detection.[4] Computed tomography is the gold standard of detection and to further evaluate the extent of the air within the spinal canal.[4]

Both pneumorrhachis and pneumomediastinum required short period of close observation, preferably in intensive care unit with eventual discharge with home rest with avoidance of Valsalva.[5] Further investigation and management of the primary medical condition (if any) should be concurrently carried out. The possibility of rapid and irreversible neurologic deterioration remains if underlying cause is not fully treated. Thus, pneumomediastinum complicated with pneumorrhachis mandates a higher level of care and heightened suspicion of subtle neurologic symptomatology.

REFERENCES

1: Gasser CRB, Pellaton R, Rochat CP. Pediatric Spontaneous Pneumomediastinum. Pediatirc Emergency Care. 2017;33(53):70-374.

2: Oertel MF, Korinth MC, Reinges MHT, Krings T, Terbeck S, Gilsbach JM. Pathogenesis, diagnosis and management of pneumorrhachis. European Spine Journal. 2006;15(Suppl 5):636-643. [Accessed on 20 June 2020].

3: Chalumeau M, Le Clainche L, Sayeg N, Sannier N, Michel JL, Marianowski R, Jouvet P, Scheinmann P, de Blic J. Spontaneous pneumomediastinum in children. Pediatr Pulmonol. 2001;31:67-75.

4: Chiba, Y. & Kakuta, H. Massive subcutaneous emphysema, pneumomediastinum, and spinal epidural emphysema as complications of violent coughing: a case report. Auris Nasus Larynx. 1995;22(3):205-208.

5: Fitzwater JW, Silva NN, Knight CG, Malvezzi L, Ramos-Irizarry C, Cathy A. Burnweit, Management of spontaneous pneumomediastinum in children. Journal of Pediatric Surgery. 2015;50(6) 2015;983-986.