

**Table S1: CT findings of thoracic inlet pathologies and their corresponding chest radiographic findings**

<b>Pathologies</b>	<b>CT findings</b>	<b>Corresponding chest radiographic findings</b>
<b>Traumatic</b>		
<b>Mediastinal fat stranding</b>	Fat haziness within mediastinum, usually surrounding vascular structures	Abnormal mediastinum
<b>Mediastinal hemorrhage</b>	Discrete slightly hyperattenuating collection within mediastinum, potentially surrounding vascular structures	Abnormal mediastinum
<b>Pneumomediastinum</b>	Extraluminal air within soft tissues of mediastinum	Same as CT
<b>Pulmonary contusion</b>	Fluffy, ill-defined airspace opacification in the lungs not respecting anatomical boundaries; may spare subpleural region	Patchy pulmonary opacification
<b>Pulmonary laceration</b>	Pulmonary cavity filled with blood, air or both and surrounded by pulmonary contusion	Usually not seen
<b>Pneumothorax</b>	Extraluminal air collection inside pleural cavity, often in curvilinear shape	Same as CT
<b>Pleural fluid</b>	Fluid of variable attenuation within pleural cavity, usually in dependent portion	Apical cap
<b>Extrapleural hematoma</b>	High-attenuating collection, often biconvex shape and at site of rib fracture, displacing extrapleural fat inwardly to the lung	Apical cap
<b>Rib fracture</b>	Cortical break – without or with displacement – of ribs	Same as CT
<b>Clavicle fracture</b>	Cortical break – without or with displacement – of clavicle	Same as CT

<b>Acromioclavicular dislocation</b>	Loss of normal articulation between acromion and distal clavicle	Same as CT
<b>Scapular fracture</b>	Cortical break – without or with displacement – of scapula	Same as CT
<b>Significant nontraumatic</b>		
<b>Mediastinal vascular dilation</b>	Dilation of artery ( $\geq 1.5$ times of expected normal caliber) – often a branch of aortic arch – within superior mediastinum	Abnormal mediastinum
<b>Pulmonary nodule(s)</b>	Rounded or oval-shaped discrete noncalcific solid abnormality inside the lung parenchyma	Same as CT
<b>Pulmonary micronodules</b>	Tiny pulmonary nodules of less than 4 mm; having various shapes and arrangements including <ul style="list-style-type: none"> <li>- Tree-in-bud (V- or Y-shaped micronodules in lung periphery)</li> <li>- Centrilobular (micronodules in centrilobular distribution; not touching pleurae/fissures)</li> <li>- Other appearances</li> </ul>	Usually not seen
<b>Groundglass opacity</b>	Increased lung opacity without obscuration of lung markings	Usually not seen
<b>Groundglass nodule(s)</b>	Similar to pulmonary nodule(s) but attenuation is lower (not obscure lung markings)	Usually not seen
<b>Cavity</b>	Air-filled collection with soft-tissue rims within lung parenchyma	Same as CT
<b>Atelectasis</b>	Airspace parenchymal opacification with loss of volume	Same as CT

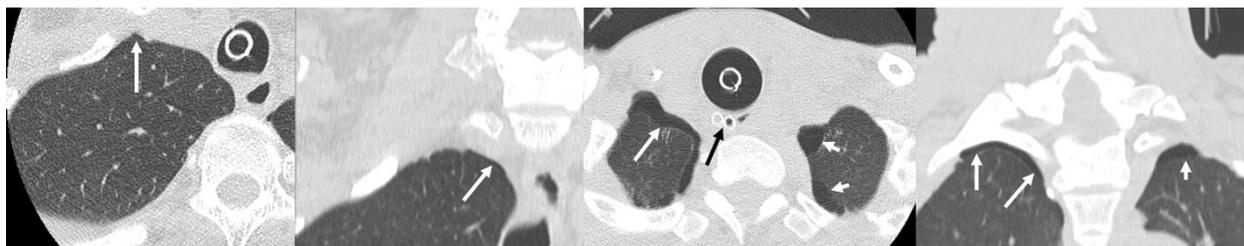
<b>Septal thickening</b>	Thickened interlobular septa of lung parenchyma	Usually not seen
<b>Active tuberculosis</b>	Cavity, tree-in-bud and centrilobular pulmonary micronodules, pulmonary nodule(s), groundglass opacity in uni- or bilateral lung apices	Same as CT
<b>Pulmonary malignancy</b>	Irregular-shaped pulmonary nodule(s) or mass(es) with or without spiculated border	Same as CT
<b>Foreign body</b>	Abnormal structure of various attenuation and shape usually within esophagus or trachea	Same as CT
<b>Malignant bone lesions</b>	Lucent or sclerotic lesions associated with soft tissue masses	Same as CT
<b>Non-significant</b>		
<b>Parenchymal scars</b>	Linear or curvilinear pulmonary opacities associated with distortion of pulmonary architecture	Usually not seen
<b>Calcifications</b>	High attenuation foci or nodule(s)	Same as CT
<b>Bronchiectasis</b>	Dilation of bronchi greater than their accompanying pulmonary artery branches	Usually not seen
<b>Emphysema</b>	Increased lucency of pulmonary parenchyma without definable walls; without or with stretched lung markings	Same as CT
<b>Blebs/bulla</b>	Focal lucency within pulmonary parenchyma with thin walls	Usually not seen
<b>Benign bone lesions</b>	Bone islands; lucent lesions with complete and smooth sclerotic rims	Same as CT

**Table S2: Performance of portable trauma chest radiography in identification of thoracic inlet abnormalities\* using cervical spine CT as a reference standard**

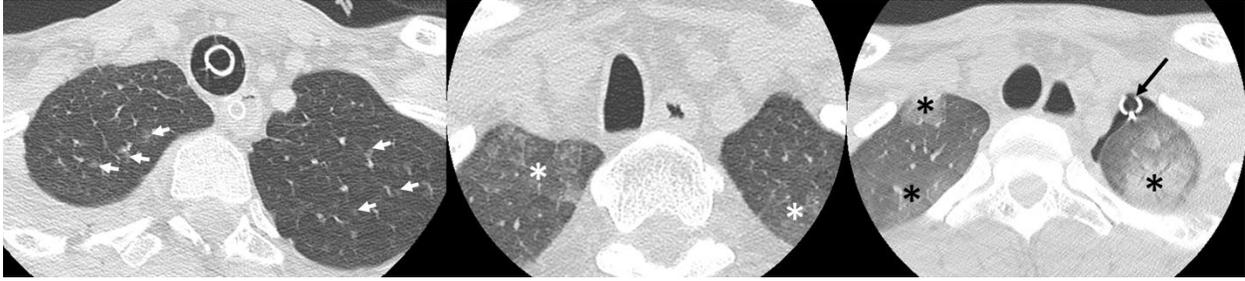
	True positive	False positive	False negative	True negative	Sensitivity (95% CI)	Specificity (95% CI)
<b>Overall performance</b>	<b>90</b>	<b>7</b>	<b>159</b>	<b>129</b>	<b>36.14</b> <b>(30.17-42.45)</b>	<b>94.85</b> <b>(89.68-97.91)</b>
<b>All traumatic findings</b>	<b>52</b>	<b>51</b>	<b>40</b>	<b>242</b>	<b>56.52</b> <b>(45.78-67.83)</b>	<b>82.59</b> <b>(77.76-86.76)</b>
<b>Abnormal mediastinum</b>	0	4	11	370	0.00 (0-28.49)	98.93 (97.28-99.71)
<b>Pulmonary contusion</b>	17	24	23	321	42.50 (27.04-59.11)	93.04 (89.83-95.49)
<b>Pneumothorax</b>	9	0	40	336	18.37 (8.76-32.02)	100 (98.91-100)
<b>Extrapleural hematoma</b>	1	48	1	335	50.00 (1.26-98.74)	87.47 (83.73-90.61)
<b>Rib fracture</b>	12	10	12	351	50.00 (29.12-70.88)	97.23 (94.96-98.66)
<b>Clavicle fracture</b>	7	16	1	361	87.50 (47.35-99.68)	95.76 (93.20-97.56)
<b>Scapular fracture</b>	0	3	1	381	0 (0-97.50)	99.22 (97.73-99.84)
<b>All significant nontraumatic findings</b>	<b>8</b>	<b>8</b>	<b>82</b>	<b>287</b>	<b>8.89</b> <b>(3.92-16.77)</b>	<b>97.29</b> <b>(94.73-98.82)</b>
<b>Pulmonary nodule(s)</b>	4	5	27	349	12.90 (3.63-29.83)	98.59 (96.73-99.54)
<b>Active tuberculosis</b>	3	5	10	367	23.08 (5.04-53.81)	98.66 (96.89-99.56)

<b>Destructive bone lesions</b>	1	0	0	384	100 (2.50-100.00)	100 (99.04-100.00)
<b>Nonsignificant findings</b>	13	12	211	149	5.80 (3.13-9.72)	92.55 (87.34-96.09)
<b>Parenchymal scars</b>	20	3	54	308	27.03 (17.35-38.61)	99.04 (97.21-99.80)
<b>Calcifications</b>	4	0	11	370	26.67 (7.79-55.10)	100 (99.01-100)
<b>Bronchiectasis</b>	0	1	24	360	0 (0.00-14.25)	99.72 (98.47-99.99)
<b>Emphysema/blebs</b>	1	0	92	292	1.08 (0.03-5.85)	100 (98.74-100)

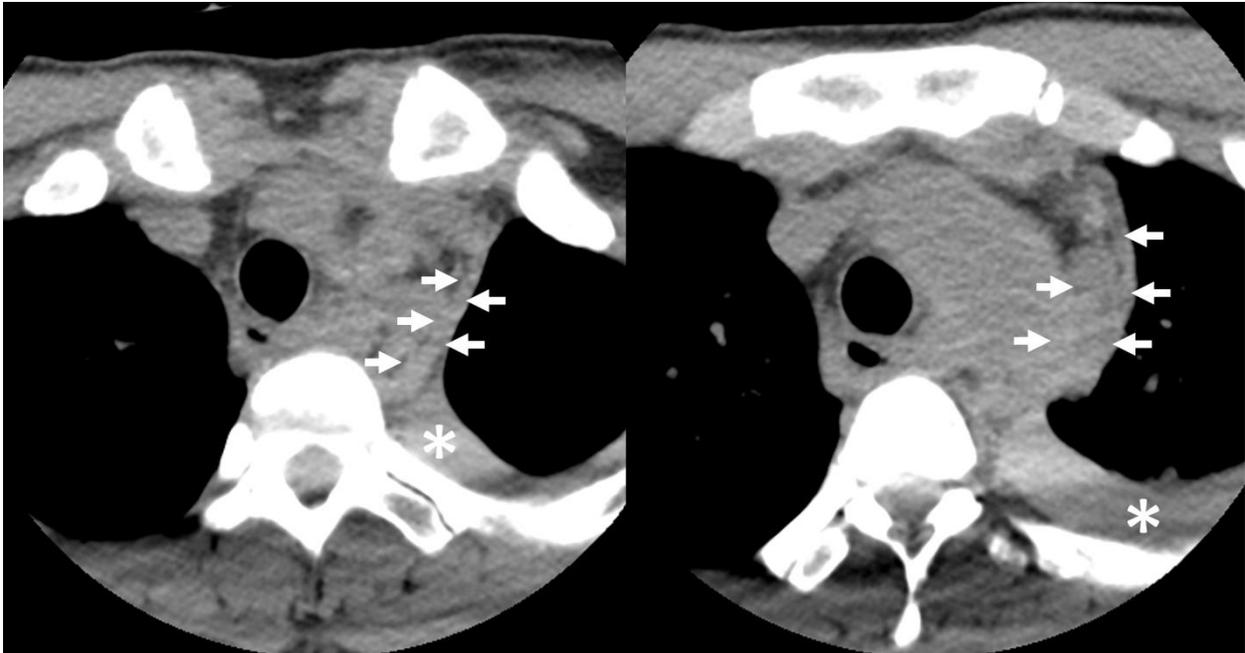
\*Listed entities include those deemed potentially visible on chest radiography and were present in our study cohort



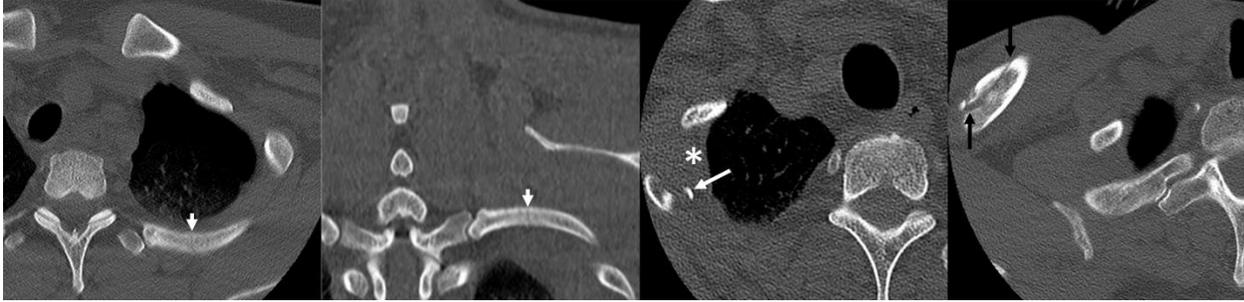
**Figure S1: Pneumothorax and subpleural bleb/bulla.** Axial and coronal-reformatted CT images in lung window of two different patients show minimal right pneumothorax (long arrows). A few small subpleural blebs/bullae (short arrows) in the left lung are convex toward the lung parenchyma. Perception of minimal pneumothorax may be improved with coronal reformation. Black arrow = esophagogastric tube coiled within the thoracic esophagus.



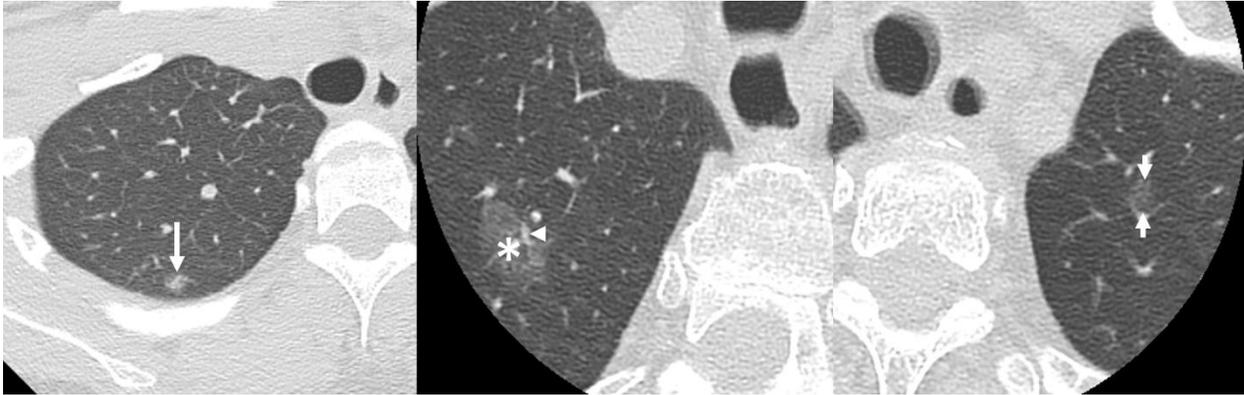
**Figure S2: Pulmonary contusion.** Axial CT images in lung window of three different patients show different features and extent of pulmonary contusion, which include small ill-defined centrilobular groundglass opacities (short arrows), ill-defined groundglass opacities superimposed with interlobular septal thickening (crazy paving pattern; white stars), and “fluffy” groundglass opacities with consolidations (black stars). Black arrow = intercostal drainage tube with left pneumothorax.



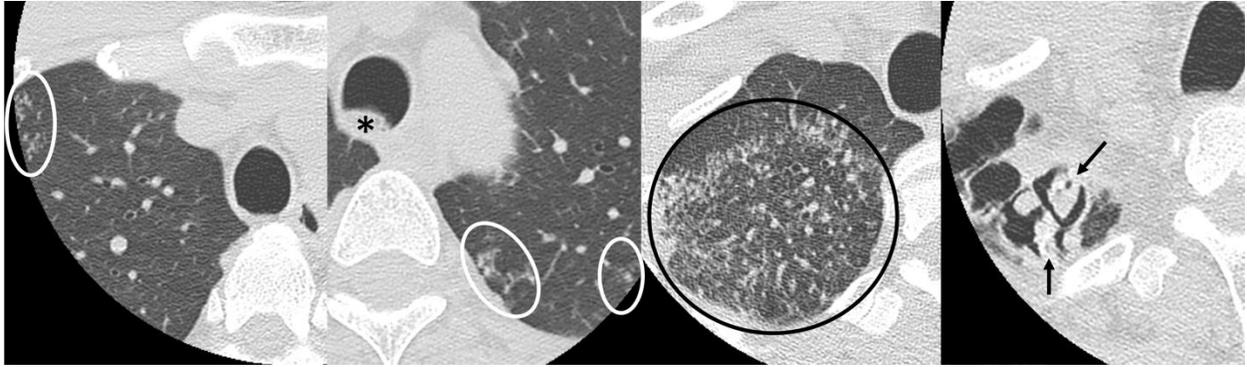
**Figure S3: Mediastinal hemorrhage.** Axial CT images in soft-tissue window show ill-defined isoattenuating bands or streaks (arrows) interspersed within superior mediastinal fat, abutting aortic arch and its branches. There is a small amount of isoattenuating left pleural fluid (stars), representing hemothorax.



**Figure S4: Rib and clavicle fractures.** Axial and coronal-reformatted CT images in bone window/algorithm of three different patients show a nondisplaced fracture of the left posterior rib (short white arrows), a displaced rib fracture fragment (long white arrow) associated with an extrapleural hematoma (star), and a nondisplaced comminuted right clavicle fracture (black arrows). These can be easily overlooked on a cervical spine CT due to their subtlety and location at the edge of image series.



**Figure S5: Subsolid pulmonary nodules.** Axial CT images in lung window of three different patients reveal three subsolid pulmonary nodules. Two are part-solid groundglass nodules (long arrow and star), in which an arrowhead indicates a solid portion of the larger nodule. Short arrows point at a pure groundglass nodule.



**Figure S6: Pulmonary micronodules and cavities.** Axial CT images in lung window of four different patients demonstrate small clusters of tree-in-bud opacification and centrilobular nodules (white oval), a larger area of the same abnormality (black oval), and a few air-filled cavities containing rounded contents (arrows). The black star represents fluid in the distal trachea.