Contralateral hyperinflation: Computed tomography demonstration of an unusual complication of unrecognized endobronchial intubation

Sir,

I read the case report on contralateral hyperinflation by Debnath J[1] et al, with great interest. Though the mechanism proposed by the authors for the contralateral hyperinflation in this case is quite interesting and thought provoking, I would like to make an alternative explanation for the same which appears to me as more physiological. The collapse of the contralateral lung in an undiagnosed main stem endobronchial intubation is not an acute phenomenon. It takes about 4-24 hours for all the air to be absorbed and radiopacity to develop on the non-ventilated lung.[2] The immediate response in such scenario is a hypoventilation-mediated hypoxic vasoconstriction and oligemia induced decreased lung density, radiologically seen as increased translucency and paucity of vascular markings.[3] Improper patient positioning during imaging, which often can happen in a trauma patient, may shift the mediastinum. The patient was received after an hour of injury and underwent immediate CT scan, the imaging findings of the left lung can be normal physiological response as explained above.

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References