



Radiologists as well as referring physicians should be aware of vascular air embolism, which can occur after contrast injection in patients undergoing CT scan” Sodhi et al (2015).

Reference:

Sodhi, K.S., Saxena, A.K., Chandrashekhar, G., Bhatia, A., Singhi, S., Agarwal, R. and Khandelwal, N. (2015) Vascular air embolism after contrast administration on 64 row multiple detector computed tomography: A prospective analysis. Lung India. 32(3), p.216-9.

Risk of air embolism after intravenous contrast administration [@ivteam](http://ctt.ec/ChHk2+) #ivteam

Click To Tweet

Abstract:

BACKGROUND: Vascular air embolism is being progressively reported as a nonfatal event with increase in use of computed tomography (CT) as a diagnostic modality. This study was undertaken to study the frequency and site of vascular air embolism in patients undergoing contrast-enhanced CT (CECT) and analyze CT parameters that influence its prevalence and final outcome.

MATERIALS AND METHODS: This was a prospective study approved by departmental ethics committee. Presence and location of air emboli in 200 patients who underwent CT scan of

chest on a 64 detector scanner was recorded. We analyzed the role of various factors that could influence the prevalence of air embolism after injection of contrast in CECT scans. These factors included the amount of contrast injected, rate of flow of injection of contrast, site of injection of contrast, and size of intravenous access line.

RESULTS: Iatrogenic vascular air emboli were seen in 14 patients (7% of total). The locations of air emboli were main pulmonary artery in 12 (6% of total), left brachiocephalic vein in 3 (1.5% of total), right atrial appendage in 4 (2% of total), and superior vena cava (SVC) in 1 (0.5%) patient. There was no association between volume of contrast, flow rate, site and size of intravenous access, and presence of air emboli.

CONCLUSION: Radiologists as well as referring physicians should be aware of vascular air embolism, which can occur after contrast injection in patients undergoing CT scan. Age, volume of contrast, flow rate of pressure injector, and site and size of venous cannula do not influence the likelihood or incidence of detection of venous air emboli on CT scans.

Full Text

Thank you to our partners for supporting IVTEAM

