# Imaging

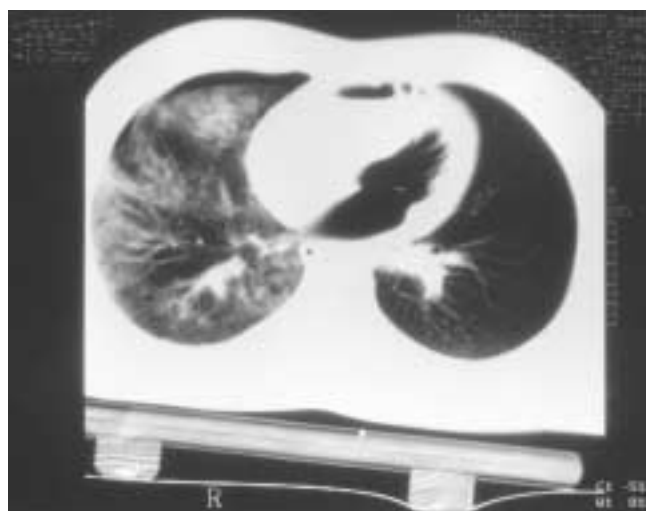# Massive Air Embolism Caused by Blunt Chest Trauma

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[A] Chest X-ray showing air in the left ventricle and aortic arch.

[B] Postmortem CT showing a large amount of air in both ventricles and severe contusion of the right lung. A small right pneumothorax is also noted.

A 16 year old male pedestrian was struck by a car. He was brought to the admitting area intubated. Physical examination showed his head and neck to be within normal limits. His pupils were dilated and unresponsive, and there were bruises over the right side of his chest, abdomen and pelvis. On chest X-ray, air was seen in the heart and aorta [Figure A]. The patient developed cardiac arrest; cardiopulmonary

CTPM = computed tomography postmortem

resuscitation was unsuccessful and the patient was pronounced dead 20 minutes after arrival. The family refused a formal autopsy but gave their consent to a postmortem computed tomography scan. CTPM scans of the head and neck were normal. In the chest CT a large amount of intraventricular air was seen in both ventricles, especially on the left side and in the aortic arch [Figure B]. There was also contusion and interstitial emphysema of the right lung. We believe the cause of

death was massive cardiac air embolism secondary to blunt chest trauma, with pulmonary vessel rupture and severe parenchymal destruction of the lung.

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> *To be a surrealist ... means barring from your mind all remembrance of what you have seen, and being always on the lookout for what has never been.*
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> *René Magritte (1898-1967), Belgian surrealist painter, best known for his images of figures in bowler hats*