# Multislice CT angiography of peripheral pulmonary embolism

#### **ESSAY**

SUBMITTED FOR FULFILLMENT OF Msc degree IN RADIODIAGNOSIS

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### **Abstract**

The most important advantage of CT over other imaging modalities is that both mediastinal and parenchymal structures are evaluated, and thrombus is directly visualized. Studies have shown that up to two thirds of patients with an initial suspicion of PE receive another diagnosis, some with life threatening diseases, such as aortic dissection, pneumonia, lung cancer and pneumothorax. Most of these diagnoses are amenable to CT visualization, so that in many cases a specific etiology for the patient's symptoms and important additional diagnosis can be established.

Key Words:

Contrast Media - Inferior Vena Cava - Pulmonary Embolism .

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# **List of Figures**

Figures	Content	Page
Fig. 1	Lung Anatomy (Quoted from Stranding et al., 2008).	4
Fig. 2	Pulmonary arteries and veins (Quoted from Stranding et al., 2008)	5
Fig. 3	The relations of the pulmonary arteries and primary bronchi seen from the front. (Quoted from Stranding et al., 2008).	8
Fig. 4	A, Anterior view showing main pulmonary trunk passing posteriorly. B, Posterior view with aorta and spine removed. (Quoted from Ulfacker et al, 2007).	9
Fig. 5	Distribution of the pulmonary artery in both lungs (Quoted from Ulfacker et al, 2007)	14
Fig. 6	Schematic drawing of the pulmonary veins and left atrium. (Quoted from Ulfacker et al, 2007)	16
Fig. 7	Chest CT Showing Pulmonary Artery Bifurcation (Quoted from Ryan et al., 2004)	17
Fig. 8	MHCT pulmonary angiography.  Rotational ("paddlewheel") 2D reconstruction image shows ability of	18

	MHCT to image subsegmental pulmonary	
	arteries (arrow). (Quoted from Goo et al,	
	2003).	
Fig. 9	MDCT shows reconstructed coronal	19
	orientation of peripheral pulmonary	
	vasculature. (Quoted from Goo et al,	
	2003).	
Fig. 10	Bolus tracking. A,B,C,D: Coned-down	34
	views of axial images sequentially	
	obtained at the same exact level following	
	a bolus of intravenous contrast media,	
	with a region-of-interest cursor placed	
	over the main pulmonary artery in each	
	image. E: A real-time graph demonstrating	
	the level of contrast enhancement within	
	the main pulmonary artery as a function of	
	time. (Quoted from Naidich et al., 2007).	
Fig. 11	Effects of image windowing. A,B:	38
	Identical contrast-enhanced axial sections	
	through the right main pulmonary artery	
	imaged with window widths of 400 HU	
	(A) and 1,000 HU (B), respectively, with	
	corresponding window widths of 40 HU	
	(A) and 150 HU (B) C,D: Identical	
	coned-down sections through the inferior	
	portion of the right hilum (Quoted from	
	Naidich et al, 2007).	

Fig. 12	Use of maximum intensity projections	40
	(MIPs). A: Axial 10-mm maximum MIP	
	image demonstrates multiple left-sided	
	PE. B: A 7-mm off-axis coronal MIP	
	(Quoted from Naidich et al, 2007).	
Fig. 13	Paddlewheel Reconstructions. A,C: Three	41
	1-mm multiplanar reconstruction images	
	selected from a set of images obtained	
	using a 360-degree paddlewheel	
	reconstruction algorithm. (Quoted from	
	Naidich et al, 2007).	
Fig. 14	Multiplanar reconstructions. A: 2-mm	42
	axial image demonstrates an completely	
	occluded subsegmental pulmonary artery	
	(arrow). B,C: Off-axis axial and coronal 5-	
	mm maximum intensity projection	
	reconstructions, respectively (Quoted from	
	Naidich et al, 2007).	
Fig. 15	Image depicting an experimental method	44
	for providing automated three-dimensional	
	surface shaded renderings of the	
	pulmonary vasculature. (Quoted from	
	Naidich et al, 2007).	
Fig. 16	Computer-assisted diagnosis. Axial (top)	45
	and coronal images (bottom), as viewed	
	using an experimental CAD device.	
	(Quoted from Naidich et al, 2007).	

Fig. 17	Vessel bifurcation. (A) A small lucency in	48
	a subsegmental vessel in the right upper	
	lobe. (B) Vessel bifurcation at this	
	site.(Quoted from Phillip Boiselle and	
	White, 2007)	
Fig. 18	Mucous plug (Quoted from Phillip	50
	Boiselle and White, 2007)	
Fig. 19	Transverse gadolinium-enhanced multi-	53
	detector row CT angiograms. Scans	
	obtained at the levels of the (a) carina and	
	(b) right bronchus intermedius. (Quoted	
	from Martin Remy Jardin et al, 2006).	
Fig. 20	Transverse gadolinium-enhanced multi	54
	detector row CT angiograms. Obtained at	
	levels of (a) tracheal bifurcation, (b) right	
	bronchus intermedius, and (c) lower lobes.	
	(Quoted from Martin Remy Jardin et al,	
	2006).	
Fig. 21	Transverse gadolinium-enhanced multi-	55
	detector row CT angiograms. Scans	
	obtained at the levels of the (a) right	
	bronchus intermedius, (b) right middle	
	lobe bronchus, and (c) lower lung lobes.	
	(Quoted from Martin Remy Jardin et al,	
	2006).	
Fig. 22	Acute pulmonary embolus (PE). A partial-	62
	filling defect is seen in a right lower lobe	
	(RLL) artery. On the left there are	

	segmental pulmonary emboli in left lower	
	lobe (LLL) (Quoted from Philip Boiselle	
	and White, 2007).	
Fig. 23	Acute pulmonary embolus (PE). "Railway	63
	track sign" of clot floating in the anterior	
	segmental left upper lobe (LUL) artery. A	
	mural thrombus forming acute angles with	
	the vessel wall is present in the RUL	
	artery. (Quoted from Phillip Boiselle and	
	White, 2007).	
Fig. 24	CT scan (A) shows a pulmonary embolus	65
	within the postero-basal subsegmental of	
	the right lower lobe artery (B) shows a	
	wedge-shaped non enhancing soft tissue	
	with small irregular air inclusions in the	
	corresponding right lower lobe,	
	"Hampton's hump." (Quoted from Phillip	
	Boiselle and White, 2007).	
Fig. 25	Post-processing techniques. Small	66
	subsegmental embolus that was primarily	
	missed on axial section (A) but picked up	
	on axial thin-slab maximum intensity	
	projection (arrow) (B). (Quoted from	
	Phillip Boiselle and White, 2007).	
Fig. 26	Chronic PE CT scan (A) and axial oblique	67
	MIP image (B) (Quoted from Phillip	
	Boiselle and White, 2007).	
Fig. 27	Paddlewheel reformation method. (a)	69

	Drawing shows how paddlewheel slabs	
	pivot on a central horizontal axis between	
	the lung hila. (b) Lateral scout image for	
	paddlewheel reformations with central axis	
	at main pulmonary artery bifurcation. (c)	
	Paddlewheel image at level of main	
	pulmonary artery bifurcation. (Quoted	
	from Simon M et al, 2001).	
Fig. 28	Paddlewheel versus coronal and axial	71
	images show improved efficiency of	
	review and enhanced assessment of	
	embolic burden. (a) Paddlewheel image	
	(b) Four coronal images are required for	
	visualization of extent of embolism. (c)	
	Multiple axial images are required for	
	visualization of extent of embolism	
	(arrow). (Quoted from Chiang et al, 2003).	
Fig. 29	Chronic pulmonary embolus (PE). CT	73
	scan mediastinal window through mid-	
	zone reveals marginated mural thrombus	
	in the right inferior lobar pulmonary artery	
	(arrow). Bilateral pleural effusions are	
	present. (Quoted from Phillip Boiselle and	
	White, 2007).	
Fig. 30	Mosaic perfusion in a patient with chronic	75
	pulmonary embolus (PE). High-resolution	
	CT through the upper lobes (A).	
	Expiratory scan (B). (Quoted from Phillip	

	Boiselle and White, 2007).	
Fig. 31	Contrast-enhanced 16-detector row CT study obtained with 0.75-mm collimation. Consecutive transverse sections show isolated peripheral pulmonary embolus (arrows) in a subsegmental pulmonary artery in segment 9 of the left lung. (Quoted from Schoepf & Costello, 2004).	77
Fig. 32	Oblique sagittal multiplanar reformation shows an embolus (arrow). (Quoted from Schoepf & Costello, 2004).	78
Fig. 33	Transverse contrast-enhanced 16-detector row CT image. Isolated peripheral pulmonary embolus (arrow) in sixth-order pulmonary arterial branch in segment 8 of the right lung is shown. (Quoted from Schoepf & Costello, 2004).	78
Fig. 34	CT angiography show isolated pulmonary emboli (arrows) in segmental and subsegmental arteries in the right middle lobe of the lung and allow detailed visualization of course of obliquely oriented vessels and of isolated filling defects in segmental and subsegmental branches. (Quoted from Schoepf & Costello, 2004).	79
Fig. 35	Pulmonary infarct. Frontal chest	83

	radiograph reveals wedge-shaped area of	
	air-space disease in left costophrenic	
	sulcus. (Quoted from konstantinide et al,	
	2007).	
Fig. 36	Frontal chest radiograph in a patient with	83
	documented acute PE demonstrating	
	enlargement of the right interlobar	
	pulmonary artery-the "sausage"	
	appearance. (Quoted from konstantinide	
	et al, 2007).	
Fig. 37	Frontal (A) and lateral (B) chest	84
	radiographs demonstrating lower lobe	
	consolidation and moderate bilateral	
	pleural effusions. The anteriorly located	
	opacity in the right lung represents a	
	pulmonary infarct. (Quoted from	
	konstantinide et al, 2007).	
Fig. 38	Acute pulmonary embolism. Perfusion	85
	scan reveals multiple wedge shaped	
	perfusion defects. (Quoted from	
	konstantinide et al, 2007).	
Fig. 39	Acute pulmonary embolism. Selective	87
	digital subtraction angiography in left	
	pulmonary artery. (Quoted from	
	konstantinide et al, 2007).	
Fig. 40	Pulmonary angiogram demonstrating an	87
	abrupt vascular cutoff representing acute	

	pulmonary embolism. (Quoted from	
	Coche et al., 2006).	
Fig. 41	A, Oblique multiplanar reformatted MR	90
	angiogram. Image quality suffers from	
	motion artifacts and allows segmental	
	analysis at best. <b>B</b> , Double oblique	
	maximum intensity projection of CT	
	angiogram shows peripheral saddle	
	embolus in segment 9 of right lower lobe.	
	( Quoted from Kluge et al, 2006).	
Fig. 42	Acute pulmonary embolism: magnetic	91
	resonance angiography. A,C: Coronal	
	images obtained in a normal subject	
	demonstrating improved spatial resolution	
	and visualization of peripheral pulmonary	
	arteries with progressively thicker	
	maximum intensity projections (MIPs) (A	
	through C, respectively). (Quoted from	
	Naidich et al., 2007).	

# **List of tables**

Table	Content	Page
Table no. 1	Computed Tomography Pulmonary Embolism Protocols	29
Table no. 2	Diagram illustrating scheme for pulmonary artery diagnosis	93

#### **List of Abbreviations**

CAD Computer Aided Diagnosis

CM Contrast Media

CNR Contrast to Noise Ratio

CPTE Chronic Pulmonary Thromboembolism

CT Computed Tomography

CTA Computed Tomography Angiography

CTP Computed Tomography Perfusion

CTPA Computed Tomography Pulmonary Angiography

CTV Computed Tomography Venography

CWD Continuous Wave Doppler

DLCO Carbon Monoxide Diffusion Capacity

DSA Digital Subtraction Angiography

DVT Deep Venous Thrombosis

ECG Electro Cardiography

ELIZA Enzyme Linked Immunosorbent Assay

FOV Field Of View

GY Gray

Hg Mercury

HRCT High Resolution Computed Tomography

HU Hounsfield Unit

IV Intra Venous

IVC Inferior Vena Cava

ISSPE Isolated Subsegmental Pulmonary Embolism

KV Kilovoltage

MA Milliampere

MAA Macro Aggregate Of Albumin

MDCT Multidetector Computed Tomography

MHCT Multislice Helical Computed Tomography

MIP Maximum Intensity Projection

MPR Multiplanar Reconstruction

MPVR Multiplanar Volume Reconstruction

MR Magnetic Resonance

MRA Magnetic Resonance Angiography

MRI Magnetic Resonance Imaging

MSCT Multislice Computed Tomography

PACS Picture-Archiving and Communications System

PAH Pulmonary Artery Hypertension

PCO2 Partial Pressure of Carbon Dioxide

PE Pulmonary Embolism

PERF Perfusion

PIOPED Prospective Investigation Of Pulmonary Embolism Diagnosis

PO2 Partial Pressure of Oxygen

PTE Pulmonary Thromboembolism

RLL Right Lower Lobe

LLL Left Lower Lobe

SCTA Spiral Computed Tomography Angiography

SPECT Single Photon Emission Computed Tomography

T<sub>C</sub> Technitium

TREAT Time Resolved Echo Shared Angiography Technique

RV Right Ventricle

SD Standard Deviation

US Ultra Sound

VENT Ventilation

VO Ventilation/Perfusion

VTE Venous Thromboembolism