

SBP Case file: Cases 4-10

[Cases 1-3 published [Acad Emerg Med](#). 2005 Dec; 12(12): 1191-4. available as an online Data Supplement at <http://www.aemj.org/cgi/content/full/j.aem.2005.06.026/DC1>]

Case 5

Title: Syncope/PE

Target Audience: Medical students, Residents

Authors: Ernest E Wang, MD and John Vozenilek, MD, Division of Emergency Medicine, Evanston Northwestern Healthcare

Case Narrative (describes what the learner will experience)

Overview:

79 year old male with history of syncope while on toilet. Presents on back board and collar. Chief complaint shortness of breath. PMH – end stage pulmonary fibrosis. Recent significant immobilization secondary to compression fracture. Patient is not DNR (the candidate must make this determination from records and family)

- Tachycardic and hypoxemic
- Recognition of PE risk factors
- Diagnosis and treatment of PE
- Discussion with family regarding pros/cons of intubation and mechanical ventilation

Learning Objectives or Assessment Objectives

KEY: PC Patient Care, MK Medical Knowledge, PBL Practice Based Learning & Improvement, ICS Interpersonal & Communication skills, P Professionalism, SBP Systems Based Practice.

For expanded definitions see www.centerforsimulation.org/dl/cc.pdf

Simulation Objectives	MS		PGY		Core Comp		
	1	2	3	4		I Jr	Sr
Management							
Preparatory for treatment of shock (IV, O2, Monitor)			x	x	x	x	PC
Appropriate Chart Review for relevant history, advanced directives					x	x	MK, PC, SBP
IV Fluids					x	x	MK, PC
Recognition of hypoxemia		x	x	x	x	x	PC

Directed history and physical with attention to ruling out causes for syncope – arrhythmia/PE/anemia/AAA

Recognition
 Physiologic Findings in syncope associated with pulmonary embolus

Teamwork
 Appropriate Mobilization of Staff

Data Gathering
 LAB: CBC, Type Screen, BMG, +/- enzymes, UA
 Films: (pCXR – to r/o PTX)
 Studies: EKG, CT Chest r/o PE.

Debriefing Objectives (understands)
 Role of anticoagulation and thrombolytics in pulmonary embolus
 Risk factors for pulmonary embolus
 Importance of chart review, advanced directives
 Roles of Imaging with and without IV contrast in face of unknown renal function

Importance of Team Interactions

Importance of Patient Communications

Critical actions checklist
 IV – O2 – Monitor
 Airway stabilization
 CT chest to r/o PE
 Anticoagulation

				x	x	x	x	PC
	x	x	x	x	x	x	x	MK
				x	x	x	x	ICS, P, SBP
								PC, MK, PBL, SBP
					x	x	x	PBL
						x	x	PBL, SBP
					x	x	x	MK
		x	x	x	x	x	x	MK
					x	x	x	PC, MK, SBP
						x	x	PBL, SBP
		x	x	x	x	x	x	ICS, P, SBP
		x	x	x	x	x	x	ICS, P, SBP

SYSTEMS-BASED PRACTICE Issues

[Modifying factors] Addresses end-of-life issues, DNR status.

[Diagnostic studies]

- 1) Understands which diagnostic studies are most pertinent to ruling out life threats.

+	-	N/A

2) Utilizes old medical records to assist management

[Prevention and Education] Family discussion regarding anticoagulation/thrombolytics/intubation

[Consultation and Disposition] Effective disposition to intensive care unit (admission criteria)

Environment

- A. Lab Set Up
 - Simulated ED
- B. Manikin Set Up
 - METI ECS
 - IV bags, tubing, catheters
 - Sim Blood Products
 - Induction and Paralytic agents
- C. Props
 - ECG: Sinus Tach with RBBB - new
 - X-rays – pCXR w/ extensive pulmonary fibrosis
 - CT scans
 - Ultrasim simulator for procedural competency
 - (basic airway and code blue cart is assumed)
- D. Distractors – none

Actors

- Nurse: Obedient but not helpful; confederate
- Mother or daughter at bedside to relay history
- Consultants – patient’s pulmonologist, internist

Debriefing Plan

- A. Method of debriefing group: with video, knowledge support items
- B. Debriefing Materials