

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 6: Title: Ludwig’s Angina

Target Audience: Medical students, Residents

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Case Narrative (describes what the learner will experience)

Overview:

75 year old male with history of fever, tongue and neck swelling, and sore throat for 2 days. Dental extraction 2 weeks prior. On fixed income and unable to pay dentist. Went to local free clinic.

- Tachycardic and febrile
- Muffled voice
- Floor of mouth swelling.

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

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Simulation Objectives	MS		PGY		Core Comp			
	1	2	3	4		I	Jr	Sr
Management								
Preparatory treatment (IV, O2, Monitor)			x	x	x	x	x	PC
Directed history and physical with attention to airway integrity and oropharyngeal abnormalities			x	x	x	x	x	MK, PC
IV Fluids			x	x	x	x	x	MK, PC
Antipyretics			x	x	x	x	x	MK, PC
IV antibiotics (PCN, clinda)					x	x	x	MK, PC
ENT or oral surgery consultation					x	x	x	PC, SBP
Recognition								
Ludwig’s Angina or deep space infection of floor of mouth					x	x	x	MK, PBL

Teamwork

Appropriate Mobilization of Staff

Data Gathering

LAB: CBC with differential, BMG, blood cultures

Films: Soft tissue neck, CT scan (optional)

Debriefing Objectives (understands)

Pathophysiology of dental abscess, Ludwig's Angina, and deep space infection

Risk factors for Ludwig's Angina

IV antibiotic choice for coverage

Importance of surgical consultation for definitive care

Importance of Team Interactions

Importance of Patient Communications

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

Critical actions checklist

- IV – O2 – Monitor
- IV fluids
- IV antibiotics
- ENT or oral surgery consultation
- Admission to hospital

SYSTEMS-BASED PRACTICE Issues

[Diagnostic studies] Understands the relative role of diagnostic studies in the management of Ludwig's Angina

[Multitasking and team management] Makes arrangements for potential "Difficult Airway"

[Modifying factors] Addresses barriers to care.

[Diagnostic studies] What diagnostic studies are most efficient

[Consultation and Disposition] Appropriate specialty consultation and admission

	+	-	N/A

[Consultation and Disposition] Effective disposition to consultant surgeon (admission criteria)

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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
 - Labs: CBC, electrolytes
 - Soft tissue neck x-ray (if asked)
 - CT scan neck (if asked)
 - MPEG video (optional)
 - Ultrasim simulator for procedural competency
 - (basic airway and code blue cart is assumed)
- D. Distractors – none

Actors

- Nurse: Obedient but not helpful; confederate
- Consultants – ENT or oral surgeon

Debriefing Plan

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