

Cardiac Assessment Lab

AMI Scenario

Dispatch: You are called to the residence for a 49 y/o male patient c/o chest pressure.

Global Survey: Scene is secure. You have all the help you need.

Upon arrival, you are greeted by patient's wife and she tells you that he has taken his heart medicine but is still having a lot of pain. You find the patient sitting upright in his recliner, with a fearful look on his face and he is clenching his fist against his chest.

Initial Assessment:

General Impression: adult male, sitting upright clenching his fist against his chest
With a fearful look on his face.

Chief Complaint: chest pressure and nausea

AVPU: alert and oriented x 3 of 3

Airway: Patent, clear and open

Breathing: Respirations are unlabored & regular, no accessory muscle use noted
With equal chest rise and fall, lung sounds are clear bilaterally.

Circulation: Radial pulses are strong and regular bilaterally.

Disability/Perfusion: Skin vitals are cool, pale and diaphoretic, cap refill >3 sec.,
Pupils are PERRL, denies any radiation of pain, moves all extremities without difficulty, denies any numbness or tingling.

Initial Treatment:

RMC, Baby ASA 4, Nitro sublingual x1 (*after checking BP & pain scale*)

Focused History/Exam:

S- chest pressure, nausea, diaphoretic

A- Codeine and PCN

M- Atenolol (antihypertensive, beta blocker), Nitroglycerin

P- HTN, Angina

L- Ate a sandwich and coffee about 3 hours ago

E- Was sitting in his recliner watching a football game when the pressure began

O- pressure began suddenly

P- Nothing makes the pain better or worse

Q- pressure, not pain

R- pressure stays in my chest.

S- rated at 7 on 0-10 scale

T- started one hour ago

Vital Signs: 138/84, 74 strong and regular, 18 unlabored, 98% RA (100% O2)

EKG: Sinus Rhythm with ST elevation

Dx: AMI

Tx: RMC, Baby ASA 4, Nitro x3, Morphine 2-10mgs *(recheck BP + pain after each intervention)*
if necessary

Cardiac Assessment Lab

Bradycardia Scenario

Dispatch: You are called for a 49 y/o female who collapsed and is complaining of Chest discomfort

Global Survey: Scene is secure, one patient, you have all the help you need.

Upon arrival you find a female sitting on the ground against a tree, conscious with her husband kneeling next to her. The husband tells you they were out walking when she grabbed her chest, sat down on the ground and stated her chest was hurting her.

Initial Assessment:

General Impression: adult female, sitting against a tree, conscious and alert

Chief Complaint: "I just don't feel right, my chest hurts"

AVPU: Alert and oriented x3

Airway: Patent, clear and open

Breathing: Respirations are regular and unlabored

Circulation: Radial pulses are slow and regular bilaterally.

Disability/Perfusion: Skin vitals are pale, diaphoretic, cap. Refill >3 secs.

Initial Treatment:

RMC, O2 100% via NRBM ~~88/48~~

Focused History:

S- Chest pain, slow pulse, low BP

A- Codeine

M- Corgard, Diabeta

P- HTN, Non-Insulin Dependant Diabetic

L- Ate dinner about 2 hours ago

E- She complained sudden, severe chest pain

O- Suddenly

P- nothing makes it feel better

Q- sharp

R- substernal, does not radiate

S- 8/10

T- Less than 10 minutes ago

Vital Signs: 88/48, 48 and regular, 20 regular, Sao2= 95% RA, 100% with NRBM

Focused Physical Exam/Assessment: Nothing significant noted.

EKG: Sinus Bradycardia

Dx: Bradycardia

Tx: RMC, Transcutaneous Pacing, Atropine 0.5mg, ~~Versed~~ Versed, ~~Saline~~ Saline

Dopamine Drip ~~if~~ *if no improvement*

Cardiac Assessment Lab

Scenario AMI

Dispatch information: you are dispatched for a 52 year old that is having chest pressure and indigestion

Global survey: you have one patient, the scene is safe, you have all the help you need and the mechanism of injury is medical

Initial assessment:

General impression	adult female who is sitting up holding her hands over her epigastrium, she just looks sick
Chief complaint	indigestion and chest pressure
AVPU	alert and oriented
Airway	open and controlled by the patient
Breathing	quality good, clear lung sounds are auscultated and good tidal volume is seen
Circulation	strong/equal radial pulses with a regular rate. skin is pale/cool/moist with capillary refill at 2 seconds
Disability	any activity makes the pressure increase
Expose	a normal appearing 52y/o

Focused history/exam:

S- indigestion	O- sudden
A- PCN	P- activity makes the pressure worse
M- Bumex, NTG, Colace	Q- dull and pressure
P- hypertension	R- none
L- 5 hours ago	S- 6/10
E- doing laundry today	T- one hour ago

Vital signs: BP 142/82 HR 116 RR20 SaO2 is 93% on room air
EKG- sinus with prominent ST elevation in lead 2

Dx: AMI/Angina

Tx: RMC, Nitro X3 sublingual, ASA oral, Morphine IVP 2-10mgs

(BUMEX-diuretic, CHF
COLACE-a stool softener)

*if
necessary*

Cardiac Assessment Lab

Bradycardia

Dispatch information: sent out for a person who won't wake up from there nap

Global survey: you have one patient, the scene is safe, you have all the help you need and the mechanism of injury is medical

Initial assessment:

General impression	adult female in bed found with snoring respirations
Chief complaint	patient is not verbal
AVPU	unresponsive
Airway	is closed unless the student opens and clears it (suction)
Breathing	rate is slow and regular; lungs are clear if suctioned
Circulation	rate is slow at the neck and not palpable at the wrist the patient is cyanotic/cool/moist; capillary refill is delayed
Disability	patient is unresponsive
Expose	well nourished adult female that is cyanotic and not responding to pain or voice

Focused history/exam:

S- unresponsive patient	O- sudden
A- NKA per family	P- nothing wakes her
M- Glipizide	Q- unknown
P- Diabetic	R- unknown
L- lunch 1 hour ago	S- unknown
E- she was napping and can't be awakened	T- 15 minutes

Vital signs: BP 60/0 HR 46 RR 10 *Dexi-127*
SO2 is 88% on room air 96% if BVM is used
EKG is a sinus bradycardia with a rate of 40-46

Dx: Symptomatic Bradycardia

Tx: See algorithm - *atropine, pace, dopamine, IV bolus*

(GLIPIZIDE-oral hypoglycemic)

Cardiac Assessment Lab

Scenario CHF

Dispatch information: you are dispatched for a 68 year old having difficulty in breathing

Global survey: you find your patient sitting in a recliner with family members present. He looks tired and pale. Unable to talk in complete sentences.

Initial assessment:

General impression	adult male who looks sick and is in obvious distress
Chief complaint	respiratory distress while watching the game
AVPU	alert and oriented
Airway	open per patient
Breathing	rate of 24 and labored. Using all accessory muscles to breath. Lung sounds have faint wheezes in the bases and audible crackles in all fields.
Circulation	skin is pale, cool, and clammy. Lips and nail beds are dusky. Heart rate is 116 and irregular. CR is delayed
Disability	moderate respiratory distress
Expose	obese older male with CABG scar on chest

Focused history/exam:

S- chest tightness with Resp. distress	O-gradual
A- NKA	P- activity increases tightness
M- Zantac, Lanoxin, K-Dur, Lasix	Q-tightness
P- CABG, HTN, CHF	R-L-jaw
L- ate full breakfast 3 hours ago	S- 6/10
E- watching the football game	T- 4 hours

Vital signs: BP 194/110 HR 116 IR RR24 labored with adventitious sounds as above. SaO2 is 87% on room air, denies any N/V.

EKG- sinus arrhythmia

Dx: CHF

Tx: RMC, Nitro X3 sublingual, Lasix ²⁰⁻⁴⁰~~40-80~~ mgs, Morphine 2-10mgs.

ZANTAC-Histamine-2 blocker which inhibits gastric acid secretion

LANOXIN-Cardiac glycoside, CHF, dysrhythmias

K-DUR-Potassium supplement

albuterol if wheezes

20-40

with med. control approval

Cardiac Assessment Lab

V-Tach with a pulse

Dispatch information: you are sent to check out a male who is not able to speak but is breathing

Global survey: you have one patient, the scene is safe, you have all the help you need and the mechanism of injury is medical

Initial assessment:

General impression	adult male in a chair who is turning blue and wont respond to voice
Chief complaint	patient is not verbal
AVPU	unresponsive to voice but responds (withdrawl) to pain
Airway	closed until the student look/listen/feel
Breathing	slow and regular with clear lung sounds
Circulation	very fast and regular at the neck faint but present at the wrist capillary refill is slow with pale/cool/moist skin
Disability	patient only withdraws to deep pain
Expose	adult male who is in obvious need of intervention

Focused history/exam:

S- patient is not verbal	O- sudden
A- unknown	P- unknown
M- unknown	Q- unknown
P- unknown	R- unknown
L- unknown	S- unknown
E- was talking to the bystanders then just stopped and slumped over	T- 10 minutes ago

Vital signs: BP 80/40 HR 140 RR 10
EKG is a wide complex tachycardia (VTACH)
SaO2 is 88% on room air and 95% if BVM is used

Dx: V- Tach with a pulse

Tx: see algorithm - ~~per~~ cardiovert

Cardiac Assessment Lab

SVT Scenario

Dispatch information: You are called for a 49 y/o female feeling dizzy.

Global Survey: Scene is secure. You have all the help you need.

Upon arrival you are greeted by a store clerk who stated the woman was shopping when she sat down and stated that she felt faint and dizzy. You find her sitting against the cart, noticeably diaphoretic and pale.

Initial assessment:

<u>General impression:</u>	adult female, responsive, diaphoretic and dizzy.
<u>Chief complaint:</u>	"I feel like I am going to pass out"
<u>AVPU:</u>	Alert and Oriented x3
<u>Airway:</u>	Patent, open and clear
<u>Breathing:</u>	Regular, non labored, equal chest rise and fall
<u>Circulation:</u>	Radial pulse is rapid and weak
<u>Disability/Perfusion:</u>	Skin vitals are cool, pale, diaphoretic with cap. Refill > 3 secs.

Initial Treatment: RMC, Oxygen 100% NRB, vagal maneuvers

Focused history/exam

S- Dizzy, diaphoretic, rapid pulse	O- suddenly
A- Codeine	P- nothing makes it better or worse
M- insulin	Q- denies any pain
P- IDDM	R- denies any pain
L- about 2 hours ago	S- 0
E- shopping, became faint and Sat down	T- started less than 10 minutes ago

Vital Signs: 108/60, 204 and weak, 20 and regular, SaO₂ 95% RA (100% O₂)

Dx: SVT

Tx: RMC, Oxygen, ~~vagal maneuvers~~, cardioversion, versed, ~~atium, adenosine~~