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# Inspiring Interprofessional Excellence

## Respiratory Scenario COPD

***Location***

Emergency Department, Pasqua Hospital, Regina, Sk.

***Situation***

Jane Doe is a 72 year old Caucasian female who staggered into the ER presenting with SOB and central cyanosis. The triage nurse took her straight to ER room 6 where Jane is lying supine in the stretcher awaiting your assessment. There is no history obtained on Jane. The respiratory therapist is currently performing an ABG on Jane (results should be back in 5 minutes). A portable CXR will be performed next (the image will be instantly uploaded to PACS).

***Vital Signs***

NIBP 158/78, HR 110, SpO2 83% on room air, RR 26

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| **1st Scenario**<br><br>• NIBP 168/78 **(BP will decrease ~ 10mmHg with the administration of O2, then decrease ~ 20mmHg with the administration of salbutamol or combivent neb)**<br>• HR 122 **(HR will decrease 10 bpm with O2 administration and another 10 bpm with administration of salbutamol or combivent neb)**<br>• SpO2 83% **(will increase depending on type of O2 device applied NC: 85%, simple mask: 90%, non-rebreather mask: 98%), (increase to 100% during salbutamol or combivent administration, have SpO2 stay at 95% post neb administration)**<br>• RR 26 **(decrease once salbutamol or combivent neb administered)**<br>• Temp 38.5 degrees Celsius via auxilla if | • Jane looks panicked and scared.<br>• Increased WOB, SOB and accessory muscle use<br>• Attempting to sit up in stretcher<br>• Lips are purple/blue in color<br>• Face is flushed, skin to rest of body is cool and dry, skin turgor tenting, mucous membranes pale and dry.<br>• Pulses +2 to radials, posterior tibialis and dorsalis pedis pulses bilaterally<br>• Cap refill 2 seconds x 4 extremities<br>• Clubbing noted to fingernails.<br>• GCS 15/15 although does not know where she is or what date it is.<br>• PERRLA 3mm bilaterally<br>• Motor strengths weak x 4 extremities<br>• Can only answer one word answers and shake head yes/no<br>• S1 S2 present with | • Introduce self<br>• Wash hands and don appropriate PPE<br>***Jane's 2 daughters arrive to help answer questions***<br>• They state she has been a smoker for 50 years and she smokes 1-2 packs/day. She takes the blue puffer when she needs to (that is her only medication) She has no allergies. She only goes to the ER when she needs a new blue puffer. They state she has been increasingly weak for the past 2 weeks and is coughing up more phlegm than usual it is greenish grey and thick where it used to be just grey and thin. Jane is widowed and lives by herself. She walks to her neighbor's house to smoke and play cards. They know no other information.<br>• Assess Jane and |

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| cannot obtain orally d/t mask | no additional heart sounds<br>• Expiratory wheezes auscultated throughout lung fields, decreased to bases bilaterally. | obtain baseline vital signs<br>• Administer O2 via (simple mask or non-rebreather)<br>• Identify need for salbutamol neb and administer it.<br>• Identify need for PIV and administer it.<br>• Review ABG, CXR order bloodwork (CBC & Diff, primary and secondary electrolytes, Creatinine, Urea), sputum and blood cultures. |
| **2nd Scenario**<br><br>• NIBP 138/62 (**providing salbutamol or combivent has been administered in previous scenario)**<br>• HR 113 **(Decrease to 105 bpm if fluid bolus administered)**<br>• SpO2 95% if patient on simple mask **(if on NC SpO2 87%, if on NRBM SpO2 100%)**<br>• RR 20<br>• Temp 38.8 degrees Celsius PO or | • Jane looks more relaxed is able to speak in full sentences but gets SOB if she talks too long, needs to catch her breath between sentences<br>• Jane states "I never go to the doctor, the last time was almost 15 years ago, he told me I had COPD, whatever that is", I borrow my friend's blue puffer when I can't breath, it helped her and it seems to help me"<br>• GCS 15/15, | • Introduce self<br>• Wash hands and don appropriate PPE<br>• Assess Jane and obtain vital signs<br>• Review diagnostic tests and order subsequent tests as needed.<br>• Attempt to obtain more history from patient.<br>• Identify on CXR RLL pneumonia<br>• Identify need for blood culture and sputum cultures and order/obtain<br>• Identify need for Abx after |

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| Auxilla | PERRLA 3mm bilaterally, motor strength strong x 4 extremities. Jane knows that she is in the hospital but not which one and the date.<br>• Face is flushed, dry and warm. Skin to rest of body is pink, dry, and cool,<br>• Cap refill 2 seconds to extremities x 4. Pulses +1 to radials, posterior tibialis and dorsalis pedis bilaterally<br>• S1 S2 present with no additional heart sounds<br>• Lung sounds coarse to RML and LLL and absent to RLL. Distant/decreased lung sounds to RUL & LUL. | reviewing CXR, CBC & Diff (WBC 21.7)<br>• Review RQHR Sepsis screening protocol.<br>• Educate/inform Jane and her family what is happening and why.<br>• Educate Jane on COPD. |

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# Cardiac Scenario Chest Pain

***Location***

Emergency department, Regina General Hospital, Regina, Sk.

***Situation***

John Doe is a 54 year old caucasian male who was brought to the emergency department 7 minutes ago by EMS for complaints of 10/10 sharp chest pain while shoveling snow. The chest pain radiates from the left pectoral area up to the left sternocleidomastoid muscle and across to the left shoulder area. Transport time was 7 minutes from the patient's home to the ER department. EMS has given 1 dose of Nitroglycerin SL (spray) which has been ineffective. EMS were able to get IV access, but the IV was accidentally removed when the IV tubing caught on the stretcher when transferring John to the ER stretcher. EMS did not get a history on John. John's wife is on her way.

***Vital Signs***

Obtained by EMS are 186/101, HR 104, SpO2 98% on 5L/min via nasal cannula, RR 22.

***Test/Procedures***

As per ER protocol for chest pain, cardiac blood work has been drawn, a 12 lead ECG has been performed and a portable chest X-ray is in progress (images will be uploaded to PACS)

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| • NIBP 188/102 (**should decrease with each nitrospray ~ 20mmHg**)<br>• HR 103, S1 S2 present with murmur<br>• SpO2 90% on 5L/min via nasal cannula. (**increase SpO2 based on O2 administration**)<br>• RR 22 (with shortness of breath) | • Patient looks panicked and scared<br>• Ashen/grey in color to face and diaphoretic<br>• Skin is cool to touch x 4 extremities<br>• Cap refill 2 seconds x 4 extremities<br>• Pulse +2 to radials, posterior tibialis and dorsalis pedis<br>• Increased work of breathing<br>• Unable to speak in full sentences "feels like an elephant is sitting on my chest", "It's hard to breath"<br>• When asked where the pain is pt states "left side of chest, neck and shoulder". | • Wash hands and don appropriate PPE<br>• Introduce self<br>• Should assess pt upon entering room identify respiratory distress<br>• Establish baseline vital signs and intervene appropriately: raise HOB, increase O2, apply simple mask or non-rebreather at appropriate O2 rate for device.<br>• Identify need for IV access and establish<br>• Identify need for additional nitroglycerin administration and administer with appropriate orders<br>• Perform focused cardiac assessment<br>• Reassess vital signs post Nitroglycerin orders<br>• Reassess chest pain<br>• Reassess vital signs<br>• Re-administer Nitroglycerin SL (spray) if ordered 2 additional doses Q5minutes<br>• Obtain patient history from patient if possible.<br>• Review bloodwork, CXR and ECG |