Suspected Corona Virus Patient Case Study

TRIAGE **Date: Today Time: Now**					
Patient Name: Ms. Grace Yi			Age: 35	Gender: F	Weight: 60kg
Presenting complaint: Shortness of breath, cough, fever					
Temp: 39.2	HR: 140	BP: 100/60	RR: 22	O_2Sat: 90%	FiO_2: RA
Cap glucose: 130			GCS: 15		
Triage note: 35-year-old woman became febrile last night with coryza and woke up acutely short of breath with productive cough, rhinorrhea, and a subjective fever.					
Allergies: None					
Past Medical History: None			Current Medications: Ibuprofen 600mg q 6 hours PRN Acetaminophen 500 mg q 4 hours PRN		

Task Alert:

Review a COVID-19 screening tool: https://www.chop.edu/clinical-pathway/2019-novel-coronavirus-emergency-clinical-pathway

What questions would be important to ask this patient?

Ask the patient if they have been near anyone that is positive for COVID. Ask if the patient has the COVID vaccination. Ask if the patient has traveled outside the country recently.

Extra Patient Information

A. Further History
She has traveled from China a week ago because she was visiting family. She also has seasonal allergies.

B. Physical Exam	
List any pertinent positive and negative findings	
Cardio: Tachycardia	Neuro: WNL
Resp: Crepitus and expiratory wheezes bilaterally, productive cough	Head & Neck: Coryza
Abdo: WNL	MSK/skin: Flushed
Other: She feels very weak and tired	

She screens positive for potential coronavirus exposure due to fever, respiratory symptoms and a high-risk travel history.

What signs and symptoms are most concerning?

Her respiratory symptoms are the most concerning as well as the coryza.

Explain the significance of these signs and symptoms.

The significance of the respiratory system symptoms is that COVID affects the lungs and breathing the most so it is important to look for possible breathing problems and coughs. Coryza is a respiratory infection that affects the nose and eyes.

What type of isolation precautions should this patient have?

This patient should be on contact and droplet precautions.

Emergency Room: Part 2 Time: 2 hours later

You notice the following rhythm:

What rhythm is this patient experiencing?

Sinus Tachycardia

Before you go into assess the patient describe what PPE you will use:

I will use a gown, gloves, mask, and goggles

Now you are in the patient's room and notice the following changes:

Patient is experiencing worsening shortness of breath with RR: 28 and O_2SAT: 84%. You work with the healthcare team to complete the following orders:

Apply O_2 by NRB mask
Portable chest Xray, BMP, CBC, ECG

Task Alert:

1) Review the chest x-ray results here: https://emsimcases.com/2020/02/18/suspected-covid-19/

Results indicate bilateral pneumonia.

2) Create a set of lab values based on what you might expect to see:
CBC: WBCs increased, RBCs decreased, H/H increased
BMP: Na decreased, K+ decreased, Ca+ increased
COVID test

3) How would you know if the non-rebreather mask is working?
Their O2 sat should go up.

Emergency Room: Part 3 Time: 15 minutes later

O_2Sat increases to 90% with supplemental O_2
Swabs for flu and coronavirus are sent

The patient will transfer to ICU. Write Report in SBAR frame you would give to the ICU RN.

S (Situation): Grace Yi is a 35 year old female who complains of shortness of breath, cough, and fever. She said that she was febrile last night and woke up with coryza, a productive cough and fever.

B (Background): She came to the emergency room about 2 hours ago. She has no relevant medical history but reported leaving the country a week ago. We ordered a chest x-ray, CBC, BMP, and ECG. Her O2 was as low as 84% at one point then we put a NRB mask on her and it has since gone up to 90%. She is also tachycardic. Chest x-ray indicated bilateral pneumonia.

A (Assessment): Based on the signs and symptoms she is suspected to have coronavirus.

R (Recommendations): I'd recommend to monitor her O2 levels and watch her pulse as well for tachycardia.

ICU Room: Part 4 Time: 1 hour later

You complete an assessment

Vitals: T: 38.6 BP: 88/50 Pulse: 130 RR: 30 O_2SAT: 86% NRB	**Focused Assessment:** Patient becoming more hypoxic, agitated. Pale, cool clammy skin	What actions should you take next? Make a check list below ● Increase oxygen in NRB mask ● drink plenty of fluids

Task Alert:
Complete the QSOFA Score found here https://www.mdcalc.com/qsofa-quick-sofa-score-sepsis

What are your findings?
Her GCS is not less than 15
her RR is greater than 22
Her systolic BP is less than 100
Scored a 2 and is at high risk fro sepsis

You call a code sepsis. What actions do you expect next?

First you would draw blood then give IV fluids and broad spectrum antibiotics

While the team is providing care for the patient, the patient's sister comes into the room upset and wanting to know what happened. Describe how you would handle the situation.

I would calmly ask the sister to step out of the room then explain to her what was going on and how we plan to handle the situation. Then I would do my best to calm her down as well and answer any questions she may have.

ICU Room: Part 5 Time: 15 minutes later

You must complete the following actions. What order will you complete these interventions. Place them in order of priority highest to lowest.

Interventions:	Prioritized Interventions
● Start Levophed drip ● Administer a Normal saline fluid bolus ● Assist with intubation ● Call the laboratory to draw blood cultures	assist with intubation
	draw blood
	Administer normal saline
	start levophed

Task Alert:
Calculate the rate (ml.hr) for the Levophed drip. The order is to give 4mcg/min. The pharmacist prepares a bag of Levophed with 4 mg/250 ml.

15 ml/hr

ICU Room: Part 6 Time: 2 hours later

You complete an assessment

Vitals: T: 37.4 BP: 110/70 Pulse: 90 RR: 14 O_2SAT: 92% (Vented 100% FiO2)	**Focused Assessment:** Patient is sedated, course lung sound present throughout, secretions thick with yellowish hue	ABG's noted below. ● pH- 7.34 ● CO2- 35 ● HCO3-18 ● pO2- 200

What's the significance of the assessment?

Vitals are improving, Pulse is down, BP is up, O2 is up
metabolic acidosis present

Any recommendations for treatments not currently being given?
Fluid increase to get rid of secreations

Follow up considerations:

1) Identify potential exposed persons, nature of exposure and discuss necessary actions
The sister who came into the room was exposed, she should get tested for coronavirus as well and stay in isolation until test comes back.

2) What are next steps for individuals who may have been inadvertently exposed?
The sister should get tested for coronavirus and stay isolated until the results come back.

3) Discuss potential risk factors involved with the care of this patient

There is a risk for contracting the corona virus yourself.

4) Discuss legal ethical considerations that you might consider in caring for this patient

Keeping information private. HIPAA. And respecting any treatment wishes the patient may have.

ICU Room: Part 7 Time: 5 days later

The patient is doing much better, so you the nurse are preparing for the patient for discharge.

Review the COVID-19 Fact Sheet for Nurses pdf document and prepare to educate the patient using the prompts below.

Patient education

1) Choose 3 points under the patient teaching sections general and/or discharge planning

Call your doctor if your breathing is getting worse
Self isolate your self
Clean and disinfect high touch surfaces daily

2) What will you share with the patient regarding these 3 points?

If your breathing becomes harder or faster or if you feel like you are getting less air call your doctor, patient often feel worse during the second week of illness
Avoid other people and self isolate other than going to the doctors office. This will help prevent the virus. If you must go somewhere you should wear a mask. Stay in isolation until symptoms are no longer present
Clean high touch surfaces such as tabletops and doorknobs, this will help prevent the virus from spreading. You should also wash your hand frequently.

3) Consider any visuals or other resources you might use to demonstrate and teach regarding these 3 points.

I would show the patient how to properly wash their hands. I would show them how to clean surfaces and what to use to clean them.

4) What questions do you anticipate the patient might have once you provide teaching?

The patient may ask how long this usually lasts. The patient would also ask if there is anything she should do once the symptoms are gone.

5) How will you answer these questions?

The virus usually lasts around 5-14 days and she is already 5 days in.
And I would tell her that she should still wear a mask and even consider self isolating for a couple more days just to make sure the virus is completely out of her system.