

Instructions for the Simulated Nurse

This is ____ calling as a part of the simulation exercise. From now I will pretend to be a nurse, Jean Palmer, and you are a fellow on call for a remote infusion center.

Doctor, we are giving a rituximab infusion to Mrs. Smith, who is 65 and has GPA.

When we started her vital signs were BP 125/75, HR 85, T 98.6 F, RR 14. She just called me over complaining of itching of her arms with some dizziness and sweating. She has never had these symptoms before.

I have continued the infusion but wanted to get your recommendations?

- If asked → I just took her vital signs: T 37.5 (99.5); BP 135/80, HR 90, RR 14/min, O2 sat 98% on room air.
- If asked about physical exam → just give the general, lungs and cardiovascular exams. If you are asked for more, give the descriptions below

Physical Examination	
General	She is mildly anxious and not in acute distress. She is sitting up in the infusion chair
HEENT	Eyes open, pupils round and reactive. No eye redness, no swelling of the lips, tongue or uvula
Lungs	Clear bilaterally
Cardiovascular	Normal rate, regular rhythm, no murmurs, 2+ pulses equal in all extremities
Abdomen	Soft, nontender, nondistended, normal bowel sounds
Neurological	Alert, oriented to self, location, year. She is interacting normally. There are no focal motor or sensory deficits
Skin	Warm, dry except for some sweat on her forehead. No rash

- If asked about co-morbidities or medications →

Past Medical/Surgical History	Medications	Allergies	Family History
Hypertension Hyperlipidemia GERD Does not smoke or drink alcohol; no illegal drug use	Aspirin 81 mg daily Losartan 50 mg daily Atorvastatin 40 mg daily Prednisone 7.5 mg daily Bactrim DS MWF	none	Mother – hypothyroidism Father – heart disease

- If asked → No breathing difficulties at this point. No nausea or abdominal pain.
- If asked → Symptoms started about 15 minutes into the infusion
- If asked → This is 3rd time getting rituximab. Received rituximab 6 months ago and then 2 weeks later
- If asked → She did not have any side effects associated with prior infusions of rituximab.
- Pre-medications → Diphenhydramine 25 mg po, acetaminophen 650 mg, methylprednisolone 100 mg IV
- Infusion rate → Infusion rate – 100 mg/hr
- If asked about interventions already started → none, called you.

What would you like me to do at this point, doctor? (any answer is correct)

Stop the Infusion

- How long? Should be 15-30 minutes, then re-start
- Repeat monitoring – how frequently? Should be 15-30 minutes
- If they say to discharge home without restarting and f/u – Say the patient “is requesting to restart due to concerns of flaring along with time and transportation challenges. Usually we re-start the infusion for such a mild reaction.”

Decrease rate and continue the infusion

- Decrease rate to what? – should be about 50% of previous rate, or 50 mg/hr – OK, I will page you back in 15 minutes with an update.
- Will page back in 15 minutes with updates.

Continue the infusion

- Okay, will continue and page you back in 15 minutes with updates. (Let them know you will actually call back in 1 – 2 minutes)

Grade 1 reaction intervention: complete the scoring sheet

Complete the evaluation form, then call the fellow back.

Tell the fellow it is now 15 minutes later.

Hi Doctor. I [continued the infusion/continued the infusion at a slower rate/stopped the infusion for 15 minutes then re-started]. Another nurse is with Mrs. Smith now so I could call you. She says her chest is tight, she feels short of breath, she feels like her tongue is swelling, she now has hives on her arms and legs, and she says her stomach is cramping.

Her BP is 110/40, HR 125, T 100.5, RR 25, 98% on RA

On exam she is diaphoretic, her tongue and lips are swollen, she is wheezing and she has diffuse urticarial rash.

What would you like us to do at this point, doctor?

If the doctor says stop the infusion, you can call out “stop the infusion” and “call a code” etc. or you can say “I’m going to keep you on speaker phone so the team can hear your instructions”

If instructions for IM epinephrine given	Patient's breathing improves and she feels much less anxious She still has urticaria	BP 115/75 HR 132 T 100 RR 16 98% on RA
If fluids and diphenhydramine given after IM epinephrine	Urticaria resolves, patient now feels comfortable	Vitals return to baseline
IF something other than IM epinephrine is suggested (IV methylprednisolone, IV Diphenhydramine, H2 blocker, etc.)	Respiratory distress worsens, she is no longer able to speak, RN asks if the provider thinks epinephrine may be useful in this case as they have seen it done before in a similar situation	BP continues to drop HR increases RR increases → until IM epinephrine is given and then as above
If IV epinephrine ordered instead of IM	RN states that they have IM epinephrine more readily available and they have seen providers administer IM formulation in this situation	See above for resolution of the case with IM epinephrine

Then thank the doctor and wrap up.

You can let them know you will come on video in a minute to give them feedback about the station.

Grade 3 reaction intervention: complete the scoring sheet

Then use the scoring sheet to guide your feedback on management during this simulated infusion reaction case.