

You arrive on scene for a 68 year old female patient who is complaining of 8/10 chest pressure radiating into her left jaw. The pressure came on after shoveling the walkway about 20 minutes ago and does not change with movement, inspiration or palpation. She also states that she finds it difficult to catch her breath and is slightly nauseated. She says that the only medication she takes is a baby aspirin every day and has not seen her family physician in several years. She has no allergies to medications. She states that she was instructed to take 2 baby aspirin when she activated 911 which she did. You complete a full set of vital signs which reveal the following: HR – 68 bpm, regular and full; RR – 20/min, regular and labored, no adventitious sounds on auscultation; SPO2 – 94% on RA; BP – 168/90; Lead II ECG – NSR with noted changes; 12 Lead ECG – Inferior STEMI (ST elevation in II, III, aVF and ST depression in V1-V4 indicative of posterior involvement); skin is pale, cool and clammy; GCS – 15.

What is your next course of action? If you said, consider the patient for further ASA you are correct! As per the Ontario Base Hospital Group (OBHG) Reference and Education Notes, Companion Document for the Advanced Life Support Patient Care Standards, Version 4.4, December 2017 (page 10 – PCP Core Medical Directives, page 26 – ACP Core Medical Directives), *“ASA is a safe medication with a wide therapeutic index (the effective dose without side effects can be from 80 – 1500 mg). The additional dose provided by Paramedics will not exceed the therapeutic dose while ensuring the correct administration of correct dose of the medication. Therefore, apply the cardiac ischemia medical directive as if no care had been rendered prior to your arrival.”*

Given that the patient has no previous Nitro use, PCP crews would initiate contact for STEMI Bypass while completing a 15 Lead ECG and expedite transport to the appropriate facility. For ACPs and those PCPs who are IV certified, what is your next course of action? If you said, establish an IV while completing a 15 Lead ECG to rule out right ventricular involvement (RVI) and to confirm posterior involvement, you are correct! Upon interpretation of the 15 Lead ECG, there is no noted elevation in V4R so you complete your Medication Safety Cross-Check for Nitro administration while your partner initiates contact for STEMI Bypass.

As the patient has no contraindications for Nitro and her vital signs remain within parameters for administration, the patient can receive a max of 3 sprays of Nitro as her 12 Lead ECG indicates STEMI. If the patient's 12 Lead ECG was negative for STEMI, then a max of 6 doses could be administered.

You have administered 3 doses of 0.4 mg SL of Nitro to your patient. She states that she has had some relief and rates her discomfort at a 5/10. What is your next course of action? If you said, continue to monitor your patient throughout the transport, you are correct! Conditions for morphine administration (STEMI or non STEMI) under the Cardiac Ischemia Medical Directive include pain of greater than or equal to 7/10.

Gathering a good history, communicating and collaborating with your partner, utilizing the resources available to you and documenting your rationale for your treatment plan are all important for sound decision-making and patient safety.