**Queen’s University Internal Medicine Simulation Course**

**Case:** Hypertensive Emergency

**Synopsis:**

67 year old patient headache.

**Number of Participants:**

1 – 2 senior medicine residents

**Objectives:**

Residents will be able to manage hypertensive urgency and it’s complications.

**Stem:**

You are the internal medicine resident working in the ER. The ER physicians have consulted you on a 67 year old patient with headache and hypertension. Patient’s initial BP was 220/105. Patient has a longstanding history of hypertension and was recently seen in outpatient internal medicine clinic for workup for secondary causes of hypertension. The emergency physicians performed a CT head which was normal.

**Roles:**

1) Primary Senior Internal Medicine Resident

2) Secondary Senior Internal Medicine Resident (optional)

3) Nurse

**Script for Roles:**

Nurse: Since arrive to ER you’ve placed the patient on monitor. Patient’s had a CT head which the ER doc tells you that was normal. The patient continues to complain of a headache.

**Hypertensive Emergency**

**Setting:** Hospital ER

**Manikin:**

* Hospital gown
* 18 gauge peripheral IV running normal saline wide open

**Resources:** IV’s, normal saline, 5% albumin, pentaspan, volunen, blood products, levophed, dopamine, dobutamine, antibiotics.

**Initial Parameters:**

**Patient:** Responsive, awake, alert, but complaining of a headache

**Vitals:** BP 240/120, HR 95, RR 18, O2 sat 96% on RA, Temp 36.8 C

Eyes: Open

Lungs: Clear bilaterally

Heart Sounds: Normal

Heart Rhythm: Sinus rhythm

Hypertensive Emergency - Scenario Flow Chart

Initial Vitals: BP 240/120, HR 95, RR 18, O2 sat 96% on RA, Temp 36.8 C

All other actions lead to death spiral

On monitor

Decompensates

Labetalol

Decompensates

Captopril/Enalapril/Nitroprusside

Decompensates

CT Head

Decompensates