

## Cover page

**Laurence Biro:** laurence.biro@utoronto.ca

**Case authors:** Richard Hoang (1T6)

**Case reviewers:** Richard Hoang (1T6), Laurence Biro (0T9)

**Case editors:** Richard Hoang (1T6), Laurence Biro (0T9)

**Final approval:** Laurence Biro (0T9)

**Date of original case:** 2015-12-05

**Date of most recent revision:** 2015-12-05

**Name of patient:** Andrew Warhol

**Learner's level of expertise:** MS1 – CC4

**What kind of case is this?** PE/Hx combination

**Anticipated length of case in minutes:** 15 minute history (MS1), 15 minute history/physical (MS2), 10 minute history/physical (CC3)

**Patient's problem(s):** Headache

**Case objectives:** Focused neurologic history and exam, closed questioning, generation of differential diagnosis, appreciation of life-threatening causes of headache

**Key challenges:** Patient in pain/discomfort, asking for pain medications, little eye contact (sunglasses, dark room), entitled and educated patient, patient believes they have “brain cancer”

**Special casting requirements:** None. Adult patient

**Most likely diagnosis:** Need to rule out Subarachnoid Hemorrhage - SAH

**Differential diagnosis:** SAH, Meningitis/Encephalitis, Temporal Arteritis, Subdural/Epidural Hematoma, Acute Angle Glaucoma, Tension Headache, Migraine Headache, Cluster Headache, CO poisoning, Cerebral Venous Sinus Thrombosis

**Examination room set-up:** Patient sitting in dark room, wearing sunglasses.

**Data collection and marking notes:**

- Simulated patient gives feedback (if not OSCE scenario)
- Examiner does marking, PEPs

### STEM ASCM1:

You are an Emergency Physician at a large community hospital. It is 5 am. You are about to see Mr. Andrew Warhol, a 44 year-old male complaining of headache. Please perform a 10-minute history.

### STEM ASCM2:

You are an Emergency Physician at a large community hospital. It is 5 am. You are about to see Mr. Andrew Warhol, a 44 year-old male complaining of headache. Please perform a 10-minute history and focused physical exam.

### STEM iOSCE:

You are an Emergency Physician at a large community hospital. It is 5 am. You are about to see Mr. Andrew Warhol, a 44 year-old male complaining of headache. Please perform a 10-minute history and focused physical exam. Be prepared to answer post-exposure prompts regarding your differential diagnosis and management plan.

## Instructions for actor

Current problem(s): Headache

Communication challenge(s): You are in pain/discomfort, asking for pain medications, you make little eye contact (sunglasses, dark room) with the examiner, you are well-educated and have a sense of entitlement, you are worried you have “brain cancer”

Age: 44

Setting: Emergency Department

### Proximal biomedical perspective

- List of problems
  - Headache
  - Photophobia, Phonophobia
  - Nausea
  - Vomiting
- Sequence of events (OPQRST, triggers, associated symptoms, why now?, etc...)
  - At 1am, you are awoken from sleep. You experience sudden onset, maximal at onset, 10/10, sharp/stabbing pain to the front of the head radiating the back of your head. You remember distinctly the exact moment it started and you felt as though someone hit you in the head with a baseball bat. The pain is constant but comes in waves. At baseline it is dull/throbbing/pounding, intermittently there is sharp/stabbing pain. There was no trigger that you noticed. The headache does not radiate anywhere and there is no neck pain or stiffness. The headache worsens with light exposure and loud sounds. Nausea was concomitant with headache, with one episode of vomiting about 1h after the headache started. It has been excruciatingly painful up until and including your presentation to the Emergency Department. Do not volunteer that this is the “worst headache of your life” unless specifically asked. You have no history of serious headaches previously: “maybe a few as a kid but nothing I can particularly remember”
- Associated symptoms or problems
  - Photophobia, Phonophobia
  - Nausea: came on with and exists with the headache
  - Vomiting: one episode, no blood
  - No vision changes
  - No slurred speech or limb weakness
  - No ataxia/dizziness
  - No syncope
  - No fever or neck pain
  - No trauma
  - No tenderness in temporal area, jaw claudication
- Pertinent risk factors or protective factors
  - You have uncontrolled hypertension. No previous history of hospitalization for headaches. No cardiac/stroke history. No history of glaucoma/ophthalmologic history. No cold climate, furnace, or other family members with headache. No previous CT/MRI or neurologic history

### Distal biomedical perspective

Past Medical History

- *You have no previous operations or hospitalizations. You have hypertension and high cholesterol (both poorly controlled)*

Medications including over the counter, herbal, oral contraceptive, etc..

- Crestor (Rosuvastatin): unsure of dose, one pill daily

- Not taking any other medications (despite poor blood pressure control): you feel that “one pill is enough”

Medical Family History: Your mother had migraines.

Smoking: 1 pack/day for 20 years

EtOH: Recreationally, 1-2 drinks each day on weekends

### Proximal context

You are a 44 year-old married heterosexual male. You have been married for 20 years to your partner (Laura). You have two children (twins: Luke 18M, and Leia 18F). Your children are away at University. Your wife drove you into hospital and is out getting you coffee. You have a supportive and close-knit family and social circle. You are well off financially. You are a successful investment banker, and your wife is a Nurse at this hospital. You live in an upscale neighborhood in a large house. You have two luxury cars.

### Distal context

- Please question the relevance and redirect other above topics back to your headache
- You feel entitled to the best medical care and expedient treatment: you are an important and successful investment banker, and your wife works at this hospital (remind the examinee of this).
- “You look a little young to be a doctor” ... “Oh you’re not a doctor? I am a very important person, and my wife works here. I would like to see a REAL doctor” ... (when situation is explained) “Fine, but make it fast”

### Patient’s perspective

- Ideas and thoughts
  - *“I already know why I am here, I’ve done some research in the waiting room – I don’t know why you need so much schooling”*
  - *“My symptoms are consistent with brain cancer. I need an MRI of my head”*
  - *“I was told one of my close friends who’s a neurosurgeon in the States that the MRI gets the best pictures of the brain, I need an MRI”*
- Concerns
  - *Brain cancer*
- Expectations
  - *“I need you to take away this pain”*
  - *“I need an MRI”*
- Feelings
  - *“I am frustrated that things are taking so long when I already know what is going on and what tests are needed”*

### For information-gathering station

How to present the symptom(s) or problem(s)

How to start the consultation:

- Patient's exact words in response to interviewer's first open-ended question
  - Oh you don’t know who I am? I guess I shouldn’t expect that from people in this area... Anyways, I woke up in the middle of the night with a headache. I have a brain tumor and I need an MRI
- What to divulge to screening questions (e.g. 'So abdominal pain and fever — anything else?')
  - When asked open question be dismissive: a REAL doctor wouldn’t have to ask all these questions; shouldn’t you know the answers to this already

- Answer closed ended questions freely
- Do not volunteer that this is your “worst headache of life” unless specifically asked either “is this the worst headache of your life” (leading) or “how does this headache compare to your previous headaches” (better)

How to respond to specific types of questions or approaches: what to divulge spontaneously and what not to

- How to respond to questions about patient ideas, concerns and expectations about the problems
  - You are assured of your diagnosis and what is required in terms of management for you in the Emergency Department
  - Only after thorough discussion/counselling do you accept the examinee’s management plan

## Actor instructions (please be detailed)

- Dress, mood, mannerisms, affect, attitude, temperament and behaviour
  - Business attire
  - Frustrated
  - Entitled
  - Dismissive
  - Short-tempered
- How to respond to questions about patient fears, concerns and beliefs about the problems
  - You are afraid of and sure that you have a brain tumor causing your headache
- Physical symptoms that need to be acted out
  - Avoid eye contact
  - Speak slowly

## Physical Exam

Please perform a Cranial Nerve Exam

- 2, 3, 4, and 6
- 5 and 7

(Given to examinee)

Vitals: 110HR, 110/60BP, Temp 36.9, 99% RA, 18RR

CVS: unremarkable

Resp: unremarkable

Abdo: unremarkable

Rest of Neuro exam: unremarkable

## Laboratory findings

CBC/lytes/BUN/Cr, Coags: within normal limits

## Props

Sunglasses for patient. Darkened Room

## Post Encounter Probe

### ASCM1

What is your differential? What is your most likely diagnosis? Why?

### ASCM2

What is your differential? What is your most likely diagnosis? Why?

### iOSCE

What is the most likely diagnosis?

What investigations?

- Bloodwork as above: get BHCG on female patients. BW is low-yield.
- Imaging: CT Head without contrast (detects acute bleeds)
- Invasive: Lumbar puncture if negative CT (student may state CT is not needed since headache onset within 6h of presentation)

What treatment?

- Pain management: Toradol/Ketorolac
- Nausea: Maxeran, Ondansetron, Gravol
- Dehydration: Normal Saline
- Consult: Depends on Imaging

1. Kurtz S, Silverman J, Draper J. *Teaching and Learning Communications Skills in Medicine*. Vol Second Edi. London: Radcliffe Publishing; 2014.