None

- Intermittent blindness in left eye
- Intermittent tingling and numbness in right arm
- Mild word-finding problems

51 yo women diagnosed with Cushing’s disease in 1990.
Underwent transsphenoidal surgery that same year, followed by XRT.
In 2005 she underwent SRS to a recurrence.
Imaging in 2012 revealed complete occlusion of the left internal carotid artery.
She remained asymptomatic until 2014.
Blood pressure control
Brain protection

Case Study #2
- 20 yo male presents with 3-4 years of progressive hearing loss in left ear.
- Intermittent mild headaches.
- Occasionally notes very mild balance issues when he closes his eyes.
- No other symptoms on careful questioning.
- No relevant family history.
46 yo woman with a one-month history of vague symptoms related to dizziness and balance.

Four days prior to presentation at our facility she experienced sudden onset of severe dizziness with nausea and vomiting.

She subsequently developed diplopia.

Strength and sensation in all four extremities were remarkably intact.
**Things I Need**
- Proper positioning
- Brain relaxation
- Very specific blood pressure management
- Brain protection

**Blood Pressure Control**
- Good perfusion
- Induced hypotension is (should be) outdated
- Large pressure swings are problematic

**Positioning**
- Elevation of the head
- Neck position
- Prone position
- Pressure sores

**Brain Protection**
- In general…
- Particularly with temporary occlusion

**Brain Relaxation**
- Diuretics
- Hyperventilation
- Good venous return
- Careful fluid replacement

“Whoa! That was a good one! Try it, Hobbs—just poke his brain right where my finger is!”
**Things That I Do That Scare You**
- Suddenly release the pressure from a clot
- Elevate the temporal lobe
- Coagulate the dura near CN V

**Cushing Reflex**
- Stage 1 – hypertension and tachycardia
- Stage 2 – hypertension and bradycardia

**Diving Reflex**
- Peripheral vasoconstriction and bradycardia
- Allows diving mammals to conserve oxygen on long dives
- Persists to some extent in most mammals, including humans
- Mediated by CN V and CN X