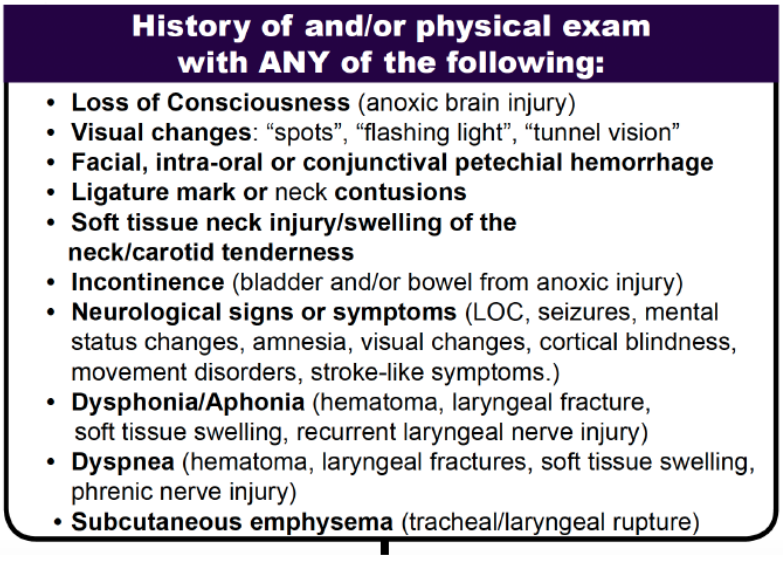
# Medical FAQ from Imaging Webinar

- The vast majority of arterial dissections will completely heal within 12 months. My recommendation is to obtain a CTA of the neck if the strangulation occurred within the last 12 months and the victim had one of the following signs or symptoms at the time of the assault: Loss of consciousness, visual changes, petechial hemorrhages, ligature marks or neck contusions, soft tissue neck tenderness or neck swelling, incontinence, seizures, tracheal or larynx injury.
- The victim will have no neurological symptoms until the clot over the dissection breaks off and goes to the bran causing a stroke.
- To date, there are no control studies on a prophylactic aspirin post strangulation. However, since the majority of dissections are managed with aspirin I see a tremendous benefit in providing an aspirin as long as there are no medical contraindications.
- Based upon a review of the literature you can have an arterial dissection and not have lost consciousness. The recommendations are to obtain a CTA of the neck if the patient has any of the signs or symptoms:




- If the CTA is normal and the patient is awake, alert and appropriate and without any additional medical issues they are safe to be discharged. The only reasons to admit for observation with a negative CTA would be for progressive symptoms, patient safety and intoxication.

- With each strangulation there is increased risk of internal injury. Repetitive strangulations would significantly increase the risk of a dissection.
- The MRI (diffusion weighted) has a definite role in evaluating a patient for an anoxic brain injury. MRI is the best imaging tool for the evaluation of soft tissue injury and cerebral hemorrhage.
- A follow-up exam is always a great idea to documented the progression of any injuries and to document any injuries which became visible after discharge. If the patient develops new symptoms or is continuing to have symptoms, i.e. difficulty swallowing, pain, neurological symptoms or voice changes they can be referred to a specialist. The patient may remember additional details not shared at the initial evaluation.
- Spinal cord damage is rare in strangulations without significant trauma. Fractures of the spinous process have been reported from squeezing on the posterior neck. The neck ligaments can be stretched or torn during a rapid flexion/extension of the neck (shaking). If the CTA is negative for a cervical spine fracture the patient can be referred for an out-patient MRI to look for ligamental or other soft tissue damage.
- Non-fatal strangulation in sexual assault: A study of clinical and assault characteristics highlighting the role of intimate partner violence by Zilkens et. al. (in this study, two thirds of NFS sexual assault cases had at least one symptom)