

Excerpt from Smock B, Green B and Sturgeon S, "Recommendations for the Medical Radiographic Evaluation of Acute Adult/Adolescent, Non/Near Fatal Strangulation." Training Institute for Strangulation Prevention.

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# RECOMMENDATIONS for MEDICAL / RADIOGRAPHIC

## **EVALUATION of ACUTE ADULT, NON-FATAL STRANGULATION**

#### GOALS:

- 1. Evaluate for acute medical conditions that require immediate treatment and stabilization
- 2. Evaluate for anoxic brain injury and injury of carotid/vertebral arteries
- 3. Evaluate bony-cartilaginous and soft tissue neck structures

### Chief Complaint: Domestic Violence / Assault / Strangulation / Attempted Suicide / Human Trafficking

History of and / or physical examination with ANY of the following:

- Loss of consciousness (anoxic brain injury)
- Altered mental status: "dizzy," "confused," "lightheaded,"
  "loss of memory," "any loss of awareness"
- Visual changes: "spots", "flashing lights," "tunnel vision"
- Incontinence (bladder and / or bowel from anoxic injury)
- Neurological signs and symptoms: seizure-like activity, stroke-like symptoms, headache, tinnitus, hearing loss, focal numbness, cortical blindness, movement disorders, abnormal mental status or neurological exam
- Petechial hemorrhages (facial, intraoral or conjunctival)
- Ligature mark or neck contusions = HIGH RISK
- Soft tissue neck injury / swelling of the neck / carotid tenderness = HIGH RISK
- Dysphonia / Aphonia / Stridor (concerning for hematoma, laryngeal fracture, soft tissue swelling, recurrent laryngeal nerve injury)
- Dyspnea (concerning for hematoma, laryngeal fractures, soft tissue swelling, phrenic nerve injury)
- Subcutaneous emphysema (concerning for tracheal / laryngeal rupture)

NOTE: The absence of external signs of soft tissue trauma does NOT rule-out the presence of significant internal injury.

Consult the on-call forensic examiner for guidance on photodocumentation and evidence preservation/collection

No history concerning for strangulation or life-threatening abnormality on physical exam



#### Discharge home after the following:

- Inpatient Consult to Social Work (immediately upon arrival to ED)
- Referral to Brooklyn Family Justice Center
- Referral to Mental Health (Kings County)
- Instructions for monitoring for worsening neurological signs/symptoms, dyspnea, dysphonia or odynophagia



Inpatient consult to GENERAL Neurology / Stroke / Neurosurgery / Trauma for acute vascular injury or stroke

Inpatient consult to ENT for laryngeal trauma, dysphonia and/or odynophagia

Evidence of arterial dissection / ischemic stroke, consider admission and daily aspirin 81 mg WITH referral to stroke clinic within 7 days upon discharge



# Recommended Radiographic Studies to Rule out Life-Threatening Injuries:

- Head CT without Contrast Traumatic Brain Injury
- CT Angiography of Carotid / Vertebral Arteries Arterial Dissection
- **CT Neck with Contrast** of Bony / Cartilaginous Structures

Consider administration of 325 mg of aspirin if any delay in obtaining radiographic imaging









