Assessment and Documentation for Strangulation Patients

History

- Initially open ended questions followed by more specifics
- Did anything happen that made you not be able to breathe?
- How did you feel?
- Are you in pain anywhere on your body? Please describe every place you're hurting.
- History guides the exam
- Documentation - Refreshes your memory and can be helpful with investigation and prosecution

Method or Manner

- Hands (manual strangulation) one or two hands? From front or behind?
- Elbow and forearm "choke hold"
- Knee
- Ligature
- Other

Number of Episodes

- Single
- Multiple
- Repeated with different methods
- How long?
- Describe the neck pressure during strangulation on a 0–10 scale (0=no pressure and 10=crushing pressure)
- How painful on a 0-10 scale

Other Circumstances

- Was the victim also smothered?
- Was the victim also shaken?
- Was the victim knocked or pounded into a wall or the ground?
- Was the victim also hit or physically assaulted?
- Did he suspect put pressure on chest or sit on chest?
- Was the victim also sexually assaulted?

Victim

- Where did incident occur? Specific location/room
- What did the victim think was going to happen?
- Prior incidents of strangulation? IPV? Physical, verbal, isolation, stalking, threats to kill?
- Children present?

Suspect

- Right or left handed?
- Wearing rings or jewelry on hands or wrists?
- What did the suspect say?
- Did suspect threaten to harm you or anyone else?
- What was the suspect's demeanor?
- What did the suspects face look like during the strangulation?
- How or why did the strangulation stop?

All supporting documents are on the mnforensicnurses.org website under the drop down menu "***Resources***" then choose ***Clinical Skills Lab Resources***. The password is **regions**

Assessment/Exam	Signs	Symptoms
Head		

o Inspect head for areas of tenderness/pain
o Head injuries to the victim may happen when the patient's head is on the floor or wall during strangulation
o Move hair systematically to look for petechiae
o Photograph signs and injuries
	o Petechiae on scalp
	o Hair pulled or hair missing
	o Swelling
	o Pain
	o Bruises
		o Neurological changes
		  o Light headed
		  o Headache
		  o Loss of memory
		  o Irritable
		  o Restlessness
		  o Uncontrolled shaking
		  o Seizure
		  o Dizzy
		  o Close to losing consciousness?
		  o Loss of consciousness
		  o Felt limp
		o Behavioral changes
		  o Agitation
		  o Irritation
		  o Amnesia
		  o Hallucinations
		  o PTSD
		  o Combativeness
		  o Disorientation

Face		
o Inspect face for areas of tenderness/pain o Photograph	o Red, flushed o Petechiae o Abrasions o Lacerations o Bruise o Swelling o Facial edema	

Eyes and Eyelids		

o Inspect eyelids
o Inspect inner aspect of upper and lower eyelids
o Inspect sclera
o Photograph
	o Petechiae on conjunctiva
	o Subconjunctival hemorrhage
	o Petechiae on eyelids (inner, outer)
	o Bruise
	o Swelling
	o Abrasions
	o Ptosis
	o Vascular congestion
	o Pain
		o Ask about visual changes
		o Seeing spots, tunnel vision, going black
		  o At time of assault
		  o At time of exam

Ears		
o Inspect front and back of ears for areas of tenderness/pain o Use otoscope to inspect ear canals o Photograph	o Petechiae in ear canal, behind the ear o Bruising behind the ear o Bleeding from ear canal	o Ask about auditory changes – muffled, loud rushing

Mouth		

o Inspect inside of cheeks
o Inspect soft palate
o Photograph - if using point and shoot camera, use flash and take photos with camera upside down
o Document vocal and swallowing changes
  o At time of assault
  o At time of exam
	o Bruising
	o Swollen tongue
	o Swollen lips
	o Laceration/abrasions
	o Petechiae on soft palate
		o Swallowing changes
		  o Trouble swallowing
		  o Painful to swallow
		  o Nausea/vomiting
		  o Drooling

Neck/Under Chin		

o Inspect front and back of neck
o Inspect underside of chin
o Assess neck ROM
  o Have patient turn head side to side
  o Have patient move head up and down
o Ask patient if their voice sounds different?
o Anyone with the patient to ask if voice sounds normal?
o Measure patient's neck circumference
  o Establish a baseline for follow-up
  o Mark neck with a Sharpie pen for accurate follow-up measurement
o Document pain using scale 0–10
  o At time of assault
  o At time of exam
o Photograph
	o Redness
	o Abrasions
	o Bruises
	o Swelling
	o Fingernail impressions (potentially under the hair)
	o Ligature marks
	o Tenderness to palpation over larynx
	o Subcutaneous emphysema
		o Vocal changes
		  o Raspy voice
		  o Hoarse voice
		  o Coughing
		  o Unable to speak
		
		o Sore throat

Shoulders/Arms		
o Inspect front and back o Assess ROM o Assess for pain o Photograph	o Redness o Abrasions o Bruises	

Chest		

o Inspect
o Assess for pain
o Photograph
o Check breath sounds (Aspiration pneumonia/pulmonary edema)
o Oxygen saturation
	o Redness
	o Abrasions
	o Bruises
	o Subcutaneous emphysema
		o Breathing changes
		  o Difficulty breathing
		  o Hyperventilation
		  o Wheezes
		  o Stridor

Gynecological		
o Pregnant at time of exam? o Number of weeks? o Due date?	o Decreased movement of the baby o Vaginal spotting or bleeding o Abdominal pain o Contractions	

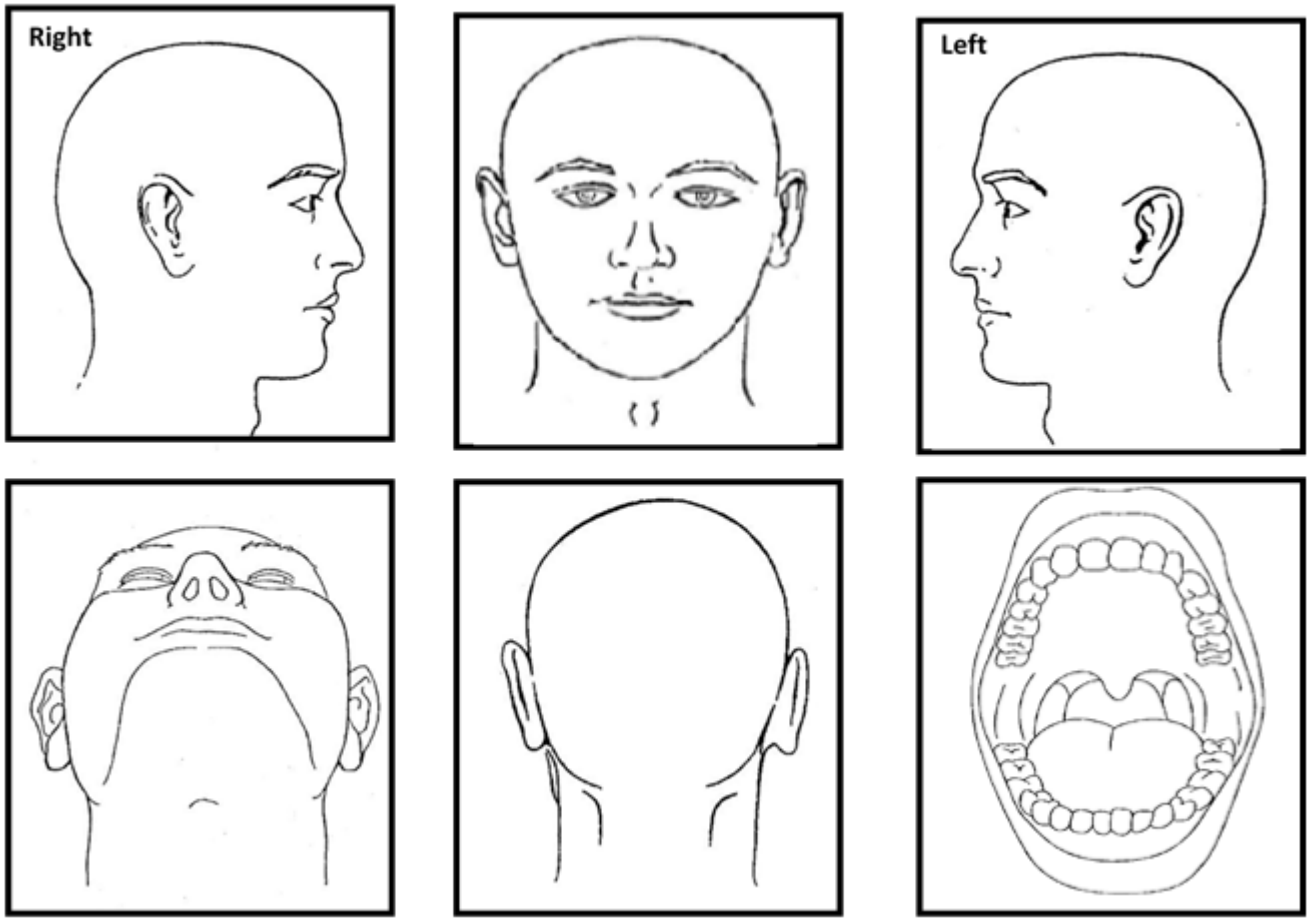
Gastrointestinal/Genitourinary		

o If the patient lost consciousness
o Normalize incontinence for patient
o Ask if they had involuntary
  o Urination
  o Defecation
	o Nausea
	o Vomiting
		o Photograph clothing if wet from involuntary urination

Assessment Resources	
o Visual representation of the signs and symptoms of strangulation	o Strangulationtraininginstitute.com or **PDF available with supporting documents on mnforensicnurses.org** o Two faces – one light skin and one for people of color
o Manual Nonfatal Strangulation Assessment Book	o https://stmlearning.com/ **PDF available with supporting documents on mnforensicnurses.org**
o National Strangulation Training Institute Medical Resources Library	o https://www.familyjusticecenter.org/professionals/medical/
o IAFN Strangulation Toolkit	o Download from IAFN website **or PDF is available with supporting documents** o https://www.forensicnurses.org/general/custom.asp?page=STOverview
o SDFI - Adult Non-Fatal Strangulation Photo Documentation Protocol 2018	o Non-Fatal Strangulation Photo-documentation Protocol Strangulationtraininginstitute.com **PDF available with supporting documents on mnforensicnurses.org**

Documentation

- Use strangulation specific documentation form
- **Example available with supporting documents on mnforensicnurses.org**
- Although visible injuries are not often present, it is imperative to document any that do exist
- Describe injuries in the narrative, as they may not photograph well
- Record each injury, including patient statements in quotes about the injury
- Document the location, shape, color, and size of all injuries, using centimeters
- Use "No injury visible at the time of exam" strangulation injuries take time to develop
- Pain on scale of 1-10
- Document vital signs and O2 saturation



Documentation for Behavior and Demeanor

Do not use:	Use:
Cool, composed, controlled, flat affect, angry, enraged	Descriptions of behavior - Agitated, irritated
Quantify Behaviors: Number of times Amount of time Intensity - loud or soft	**Qualify behaviors**: Manner measured, halting, abrupt, tentative
Eye contact: (do not use good or poor) Maintained eye contact, avoided eye contact, fixed stare, stared off to side, glared at, closed eyes (when and how long) looked only when addressed, looks at floor or ceiling	**Body posture:** Slouched, slumped, arms crossed across body, fetal position, stooped, clenched fists, wringing hands, restless, shuddering, shaking, tremors, trembling, cowering, stunned, startles easily, curled up on the cart
Speech: Responded in 1-2 word answers Responded only when asked a question Whispered, slow, mumbled, stammered, hesitant Rate: fast, slow Talked and cried at the same time	**Actions:** Blew nose, wiped eyes with tissue, clutched clothing, pacing, rocking back and forth, agitated pulling at sheets, sheets pulled up over face, pulling away
Responsiveness: (do not use "cooperative") Followed directions, Answered questions when asked Paused before answering, Unresponsive Volunteered information Disoriented	**Demeanor:** Serious, sluggish, silent, somber, solemn, listless, quiet
Nonverbal expressions: Cry, wail, sob, weep, sniffle, whimper, sigh	**Facial expressions:** Frown, scowl, grimace, flinch, wince, biting lips, clenched jaw, pursed lips, grinding teeth
Facial expressions: Frown, scowl, grimace, flinch, wince, biting lips, clenched jaw, pursed lips, grinding teeth	**Appearance:** Bruised, eyes red, dirty, wet, clothes inside out, covered with debris, scratched, bloody, smells, clothes disheveled, hair disheveled
Describe anxiety (state patient is anxious and support with behavior) Wringing hands, tapping foot, sweating profusely, dilated pupils, or use the patient's statement (e.g., "I feel nauseated," "I have a knot in my stomach," etc.)	

Evidence Collection		
o Fingernail marks on neck, face or chest?	o Swab fingernails o Did patient scratch themselves? o Did patient scratch perpetrator?	o Swab right hand fingernails with 1 moistened swab o Swab left hand fingernails with 1 moistened swab o Package in separate envelopes o Photograph patient's hands – top and palms o Ask patient about fingernails if they have broken nails etc.
o Manual strangulation?	o Ask patient to describe type of strangulation	o Swab neck with 2 lightly moistened swabs
o Inspect patient's clothing for signs of struggle	o Example: torn, stretched out neck line	o Photograph patient in clothing o Photograph close up of clothing off patient if has damage
o Did the patient receive "I'm sorry" messages texts, emails etc.?	o Encourage patient to save for law enforcement	o Patient can take screenshots of text messages
o Was the patient wearing jewelry around the neck?	o Look for marks made by jewelry	o Photograph jewelry on neck o Photograph without jewelry o Consider collecting for evidence if perpetrator used jewelry to strangle patient
o Was the perpetrator wearing rings?	o Look for marks caused by rings	o Document type of ring
o Did the patient try to defend/protect themselves?	o Will the suspect have injuries?	o Explain that many patient's don't fight back but if they did it is important to document

Medical Evaluation	
o O2 saturation:	o Check on admission and discharge o Document results
o Soft tissue x-rays	o Little value - may identify hyoid bone fracture, subcutaneous emphysema, tracheal devaition
o CT Angiogram of carotid/vertebral arteries	o Gold Standard for evaluation of vessels and bony/cartilaginous structures, less sensitive for soft tissue trauma
o CT neck with contrast	o CT is widely available and is the first line of radiologic evaluation of strangulation injuries. o Less sensitive than CT Angiogram for vessels o Good for bony/cartilaginous structures, edema and subcutaneous emphysema
o MRA of neck	o Less sensitive than CT Angiogram for vessels, best for soft tissue trauma o MRA is used specifically to examine blood vessels.
o MRI of neck	o Less sensitive than CT Angiogram for vessels and bony/cartilaginous structures o Best study for soft tissue trauma
o MRI/MRA of brain	o Most sensitive for anoxic brain injury, stroke symptoms and intercerebral petechial hemorrhage
o Carotid Doppler ultrasound	o NOT RECOMMENDED: least sensitive study, unable to adequately evaluate vertebral arteries or proximal internal carotid
o Laryngoscopy	o Visualize vocal cords and soft tissue of the oropharynx. Does not show soft tissue damage.
o Labs - depending on severity of strangulation	o CBC, CMP, coagulation studies, BHcg, toxicology panel (alcohol, drug, aspirin, and Tylenol levels), lactic acid, and ABG
o Recommendations Acute Adult, Non-Fatal Strangulation o Recommendations for pregnant	o Recommendations for the Medical/Radiographic Evaluation of Acute Adult, Non-Fatal Strangulation - Strangulationtraininginstitute.com o Recommendations for the Medical/Radiographic Evaluation of the Pregnant Adult Patient with Non-Fatal Strangulation - Strangulationtraininginstitute.com o PDFs available with supporting documents on mnforensicnurses.org

<table>
<tr><th colspan="2">Discharge</th></tr>
<tr><td>o Patient able to care for self at home?</td><td>o Consider admission for observation</td></tr>
<tr><td>o Safety Plan?</td><td>o National Center on Domestic and Sexual Violence
o PDF available with supporting documents on mnforensicnurses.org</td></tr>
<tr><td>o Danger assessment?
o Document and discuss with patient</td><td>DANGER ASSESSMENT-5
Jacquelyn C. Campbell, Ph.D., R.N.
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This brief risk assessment identifies women who are at high risk for homicide or severe injury by an intimate partner.[1, 2]

Mark Yes or No for each of the following questions. ("He" refers to your husband, partner, ex-husband, ex-partner, or whoever is currently physically hurting you.)

___ 1. Has the physical violence increased in frequency or over the past year?
___ 2. Has he ever used a weapon against you or threatened you with a weapon?
___ 3. Do you believe he is capable of killing you?
___ 4. Does he ever try to choke you?
___ 5. Is he violently and constantly jealous of you?

o PDF available with supporting documents on mnforensicnurses.org</td></tr>
<tr><td>o Discharge instructions given to patient?</td><td>o Adult Strangulation and/or Suffocation Discharge Information
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<tr><td>o Great brochure for patient education</td><td>o Facts Victims of Strangulation Need to Know Brochure
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