



# SEXUAL ASSAULT AND STRANGULATION

DEBBI ROBISON, BSN RN

Washoe County Child Advocacy Center



# THE WASHOE COUNTY CHILD ADVOCACY CENTER

**The mission of the Washoe County CAC is to ensure the health and safety of each child in a friendly environment for the purpose of minimizing trauma, providing advocacy and supporting effective investigations and prosecutions.**

- WE ARE A COMMUNITY-BASED MDT THAT RESPONDS TO CHILD ABUSE. OUR TEAM CONSISTS OF PROFESSIONALS FROM SEVERAL AGENCIES, INCLUDING:

- WASHOE COUNTY DISTRICT ATTORNEY'S OFFICE
- WASHOE COUNTY SHERIFF'S OFFICE
- RENO POLICE DEPARTMENT
- SPARKS POLICE DEPARTMENT
- WASHOE COUNTY SCHOOL DISTRICT POLICE
- UNIVERSITY OF NEVADA POLICE DEPARTMENT
- WASHOE COUNTY HUMAN SERVICES AGENCY
- CHILD ADVOCACY CENTER MEDICAL UNIT
- CHILD ADVOCACY CENTER THERAPY UNIT
- CRISIS SUPPORT SERVICES OF NEVADA
- CHILD ADVOCACY CENTER



# WASHOE COUNTY CHILD ADVOCACY CENTER

NORTHERN NEVADA CARES/SART PROGRAM NO LONGER. NOW...  
WASHOE COUNTY CHILD ADVOCACY CENTER FORENSIC MEDICAL  
TEAM.

MEDICAL EXAMS REGARDLESS OF AGE, EVIDENCE  
COLLECTION IF APPROPRIATE.

FAMILIAR TERMS: CARES-12 AND UNDER

SART-13 AND OLDER

# WASHOE COUNTY CHILD ADVOCACY CENTER

- FORENSIC INTERVIEW
  - ANY PERSON UNDER AGE OF 18.
  - ADULTS WITH MENTAL DISABILITIES
  - VICTIMS OF SEXUAL ASSAULT
  - SOME VICTIMS OF PHYSICAL ABUSE
  - WITNESSES TO INAPPROPRIATE BEHAVIOR
  - WITNESSES TO CRIMES SUCH AS HOMICIDE, DOMESTIC VIOLENCE,  
CRIMES AGAINST PERSONS

# WASHOE COUNTY CHILD ADVOCACY CENTER

- ADVOCACY FOR RESOURCES, VOC, COUNTY FUNDING NRS, THERAPY
- MEDICAL EXAM
  - OUTSIDE 72 HOUR TIME FRAME FROM CONTACT
  - REASSURE CHILD/PARENTS THEY ARE NORMAL AND HEALTHY
  - DR. JOYCE ADAMS: IT'S NORMAL TO BE NORMAL
    - 95-97% EXAMS NORMAL
- STI TESTING IF APPROPRIATE

# WASHOE COUNTY CHILD ADVOCACY CENTER

- WASHOE COUNTY CHILD ADVOCACY CENTER FORENSIC MEDICAL TEAM
- MEDICAL EXAMS-APRN
  - CHILD ABUSE
  - FOSTER CARE PLACEMENTS
  - KIDS KOTTAGE

# WASHOE COUNTY CHILD ADVOCACY CENTER

WASHOE COUNTY CHILD ADVOCACY CENTER FORENSIC MEDICAL  
TEAM

ADULT SEXUAL ASSAULT-AGE 13 AND UP

4 RN'S

24/7

EXAMS UP TO 7 DAYS AFTER ASSAULT

MEDICAL EXAM AND EVIDENCE COLLECTION



# WASHOE COUNTY CHILD ADVOCACY CENTER

WASHOE COUNTY CHILD ADVOCACY CENTER FORENSIC MEDICAL  
TEAM

CHILD SEXUAL ASSAULT-AGE 12 AND UNDER

1 RN

24/7

EXAMS UP TO 24 HOURS, AND UP TO 72  
HOURS AFTER ASSAULT-IF APPROPRIATE

MEDICAL EXAM AND EVIDENCE COLLECTION



# SEXUAL ASSAULT RESPONSE TEAM

## A PATIENT MAY...

REPORT TO POLICE:

EXAM DONE

SPECIMEN COLLECTION.

SPECIMENS WILL GO TO THE  
FORENSIC LAB FOR DNA  
ANALYSIS.

NOT REPORT TO POLICE: (18 AND  
OLDER)

EXAM DONE

SPECIMEN COLLECTION

SPECIMENS WILL **NOT** GO TO THE  
FORENSIC LAB FOR EVALUATION.

# SEXUAL ASSAULT RESPONSE TEAM

HOSPITALS DO NOT DO SA ASSAULT EXAMS.

ON CALL ONLY, EXAMS MUST BE SCHEDULED.

CALL SEXUAL ASSAULT SUPPORT SERVICES IF INFORMATION OR  
EXAMINATION NEEDED.

775-221-7600

# EMS

WHAT DO YOU NEED TO KNOW?

WCCAC LOWER LEVEL OF CARE. TRANSPORT VIA  
AMBULANCE NOT APPROPRIATE

IF PATIENT NEEDS AMBULANCE TRANSPORT FOR  
MEDICAL REASONS THEY ARE NOT APPROPRIATE FOR A  
LOWER LEVEL OF CARE

EXAMS MAY BE DONE AT THE HOSPITAL IF THE PATIENT IS  
MEDICALLY UNSTABLE OR IF THEY ARE ON A LEGAL HOLD.

# EMS



When someone tells you they were sexually assaulted, **how will you respond?**

# EMS

CRIME SCENE-CHAIN OF CUSTODY

ROOM/BED/COUCH-LE RESPONSIBILITY.

DON'T OFFER/ALLOW LE TO SEND ITEMS WITH YOU.

PATIENT-MEDICAL TEAM RESPONSIBILITY

CLOTHING COLLECTION

BUCCAL SWAB COLLECTION

MEDICAL EVALUATION

EVIDENCE COLLECTION

CONSENSUAL PARTNER BUCCAL SWABS

# EXAMINATION

- HEAD TO TOE MEDICAL EXAM AND INJURY DOCUMENTATION

SKIN SWABS BASED ON WHERE THEY WERE TOUCHED.

CLOTHING COLLECTION IF APPROPRIATE

TOXICOLOGY

HIV TESTING

PREGNANCY TESTING

STI PROPHYLAXIS

# EXAMINATION

- LOSS OF AWARENESS-31% OF EXAMS ARE ON PT'S WHO CANNOT REMEMBER WHAT HAPPENED TO THEM BUT HAVE REASON TO BELIEVE AN ASSAULT HAPPENED.
  - UPT, HIV
  - TOXICOLOGY-BLOOD AND URINE
  - SWABS
    - ORAL, NECK, BREASTS, GENITAL AND ANAL AREA
    - INJURY EVALUATION
    - ALTERNATIVE LIGHT SOURCE



# EXAMINATION

- COOL CSI STUFF...

ALTERNATIVE LIGHT SOURCE

# ALTERNATIVE LIGHT SOURCE



# ALTERNATIVE LIGHT SOURCE



# ALTERNATIVE LIGHT SOURCE



# ALTERNATIVE LIGHT SOURCE



# TOLUIDINE BLUE DYE-INJURY ID



# NEGATIVE INVERT FILTER





# NEGATIVE INVERT FILTER SOFTWARE



# NEGATIVE INVERT FILTER





# NEGATIVE INVERT FILTER



# WASHOE COUNTY CHILD ADVOCACY CENTER

- QUESTIONS ABOUT SEXUAL ASSAULT EXAMINATION PROCESSES?

# STRANGULATION

- ASPHYXIATION
  - HANGING
    - SUSPENDED WITH A LIGATURE AROUND NECK-CONSTRICTS BY GRAVITATIONAL PULL OF THE BODY WEIGHT
  - LIGATURE
    - STRANGULATION BY PRESSURE APPLIED AROUND THE NECK BY A LIGATURE
  - MANUAL
    - STRANGULATION BY HANDS, ARMS OR LEGS

# STRANGULATION

## ANOXIC PROGRESSION

- 6.8 SECONDS – UNCONSCIOUS (BRAIN CELLS BEGIN TO DIE)
  - ANOXIC SEIZURE (LASTS 2-8 SECONDS)
  - 15+ SECONDS – LOSS OF BLADDER CONTROL
  - 30+ SECONDS – LOSS OF BOWEL CONTROL
  - ?? SECONDS – POINT OF NO RETURN: “BRAIN DEAD”/COMA •
- AMOUNT OF BRAIN CELL DEATH WILL DEPEND ON THE LOCATION OF OXYGEN DEPRIVATION IN THE BRAIN, LENGTH OF UNCONSCIOUSNESS, AGE, PRIOR ANOXIC EPISODES.

# STRANGULATION

- INJURY OR DEATH FROM:
  - VENOUS OBSTRUCTION WHICH RESULTS IN CONGESTION OF BLOOD VESSELS, INCREASED VENOUS AND INTRACRANIAL PRESSURE
  - CAROTID ARTERY OBSTRUCTION WHICH STOPS BLOOD FLOW AND IMPEDES OXYGEN DELIVERY TO THE BRAIN
  - PRESSURE ON CAROTID SINUS-BRADYCARDIA AND/OR CARDIAC ARREST
  - INJURIES TO SOFT TISSUE OF NECK, ESOPHAGUS, LARYNX, TRACHEA, CERVICAL SPINE, LARYNGEAL AND FACIAL NERVES.



# STRANGULATION

- MOST ACCURATE PREDICTOR FOR SUBSEQUENT HOMICIDE

DOMESTIC VIOLENCE-1 EPISODE OF STRANGULATION

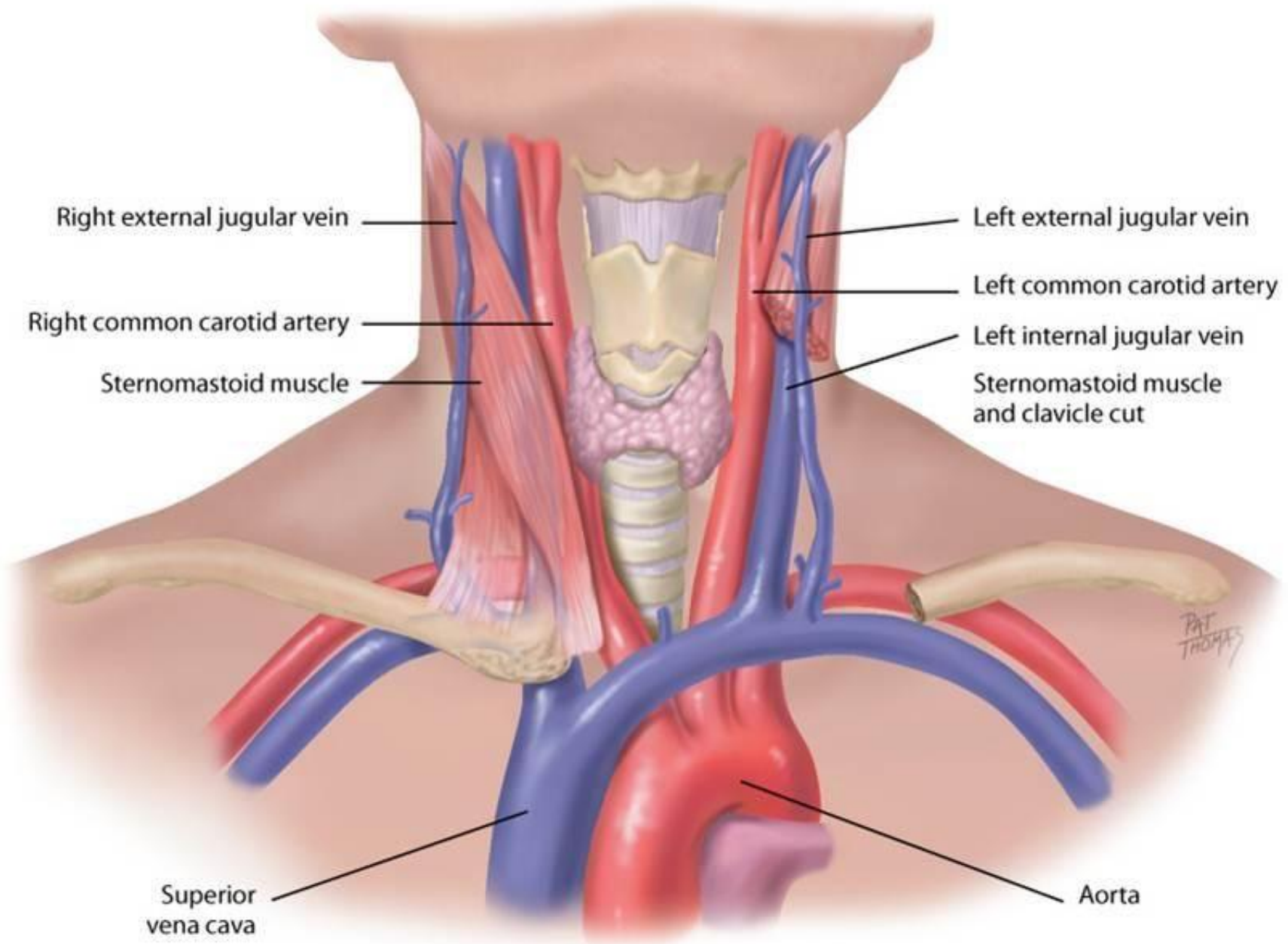
INCREASES LIKELIHOOD OF ATTEMPTED HOMICIDE 700 TIMES.

800 TIMES MORE LIKELY TO BE A HOMICIDE BY HANDS OF SAME PERSON

INCREASED RISK TO LAW ENFORCEMENT OFFICERS-50-80% OF LAW ENFORCEMENT HOMICIDE/ATTEMPTED HOMICIDE HAVE A HISTORY OF STRANGULATION ON THEIR PARTNER

# STRANGULATION

- WHEN NFS IN MINIMIZED BY PROFESSIONALS IT SENDS THE MESSAGE TO THE VICTIM THAT THEY WILL NOT BE PROTECTED, BELIEVED, THEY ARE NOT SAFE.
- IT SENDS MESSAGE TO PERPETRATOR THEY MAY CONTINUE TO CONTROL/HURT THIS VICTIM WITHOUT REPERCUSSION
- MORE COMMON IN SEXUAL ASSAULT CRIMES THAN BASIC ASSAULT OR BATTERY CRIMES
- LACK OF VISIBLE INJURY DOES NOT MEAN NO INJURY AND STRANGULATION INJURY MAY MANIFEST ITSELF LATER AS STROKE, NEUROLOGICAL LONG-TERM INJURY.



NECK VESSELS

# STRANGULATION

- EXTERNAL JUGULAR
  - 4.4 LBS OF PRESSURE TO OCCLUDE
  - 10 SECONDS-UNCONSCIOUSNESS

# STRANGULATION

- CAROTID ARTERY
  - 11LBS PRESSURE TO OCCLUDE
  - 10 SECONDS-UNCONSCIOUSNESS

# STRANGULATION-PETECHIAE EAR



# STRANGULATION-PETECHIAE EYE-LID





# STRANGULATION

- TRACHEAL OCCLUSION
  - 33LBS PRESSURE TO OCCLUDE
  - AT LEAST 33LBS PRESSURE TO FRACTURE TRACHEAL CARTILAGE.

# Strangulation

THE LAST WARNING SHOT



# AMERICAN ACADEMY OF NEUROLOGY POSITION STATEMENT

- “THE MEDICAL LITERATURE AND THE CUMULATIVE EXPERIENCE OF NEUROLOGISTS CLEARLY INDICATE THAT RESTRICTING CEREBRAL BLOOD FLOW OR OXYGEN DELIVERY, **EVEN BRIEFLY**, CAN CAUSE **PERMANENT INJURY TO THE BRAIN**, INCLUDING STROKE, COGNITIVE IMPAIRMENT, AND EVEN DEATH. UNCONSCIOUSNESS RESULTING FROM SUCH MANEUVERS IS A MANIFESTATION OF **CATASTROPHIC GLOBAL BRAIN DYSFUNCTION**.

DR. SEAN DUGAN, SHASTA COMMUNITY HEALTH CLINIC

For each second of anoxia approximately **32,000 neurons and 230 million synapses are lost.**



# RESEARCH

- 2022: VALERA – STRANGULATION AS AN ACQUIRED INJURY IN INTIMATE PARTNER VIOLENCE AND THE RELATIONSHIP TO COGNITIVE AND PSYCHOLOGICAL FUNCTIONING: A PRELIMINARY STUDY
  - 99 FEMALE PATIENTS
  - CONTROLLED FOR OTHER TBI (INCLUDING HEAD TRAUMA)
  - HAD HIGHER LEVELS OF **DEPRESSION AND POST- TRAUMATIC STRESS SYMPTOMOLOGY**
  - PERFORMED MORE POORLY ON **LONG TERM MEMORY** AND **WORKING MEMORY** COMPARED TO WOMEN WHO DID NOT HAVE A HISTORY OF STRANGULATION OR TBI

# ASSESSMENT

- VISION CHANGES- DESCRIPTORS...BLURRED VISION, SPOTS, STARS, BLACK CURTAIN, TUNNEL
- HEARING CHANGES-DESCRIPTORS...RINGING, VIBRATION
- DIZZINESS
- FEELING FAINT
- VOICE CHANGES-HOARSE OR RASPY, 911 CALL CAN BE GOLDEN
- DID YOU LOSE CONSCIOUSNESS? YES? = TBI
- IF NO...



# ASSESSMENT

FROM THE START OF THE SYMPTOMS UNTIL THE END OF THE STRANGULATION, IS THERE A GAP IN YOUR MEMORY?

**REMEMBER:** GAP IN MEMORY = LOSS OF CONSCIOUSNESS =  
ANOXIC BRAIN INJURY = TBI

# DR. SEAN DUGAN, MEDICAL DIRECTOR, STRANGULATION CLINIC, SHASTA, CA

- LOSS OF CONSCIOUSNESS AND MEMORY LOSS DURING NON-FATAL STRANGULATION (NFS)
  - PRELIMINARY DATA AS OF AUGUST, 2021
  - 171 UNIQUE PATIENTS
  - 230 STRANGULATIONS
  - 98 REPORTED GAP IN MEMORY
    - 57 REPORTED LOC (58%)
    - 41 DENIED LOC (42%)

**4 OUT OF 10 PATIENTS WHO EXPERIENCED LOC DIDN'T REMEMBER IT**

# TREATMENT-STRANGULATION INSTITUTE

- SUPPORTIVE CARE
- TRANSPORT AND MEDICAL EVALUATION REGARDLESS OF HOW WELL THEY PRESENT IN THE MOMENT.

“BECAUSE MOST VICTIMS SUFFER MINIMAL OR NO VISIBLE EXTERNAL INJURIES WITH FEW SYMPTOMS, THERE IS A TENDENCY TO MINIMIZE NON-FATAL STRANGULATION. UNTRAINED MEDICAL PROFESSIONALS OFTEN UNDERESTIMATE THE RISK OF INTERNAL INJURIES AND HAVE TRADITIONALLY BEEN RELUCTANT TO ORDER IMAGING FOR THE ALERT PATIENT WHO LOOKS RELATIVELY FINE. YET, CASE REPORTS AND RESEARCH ARTICLES HAVE PROVEN THAT VICTIMS OF STRANGULATION AND SUFFOCATION MAY EXPERIENCE A WIDE RANGE OF INTERNAL INJURIES INCLUDING INJURIES TO THE ARTERIES AND VEINS, FRACTURES, SWELLING AND OTHER INJURIES THAT MAY RESULT IN DELAYED STROKE AND DEATH.”

# IN HOSPITAL EVALUATION

- CTA FOR CAROTID ARTERY DISSECTION.
- CT/MRI NOT SENSITIVE ENOUGH TO EVALUATE BRAIN INJURY UNLESS BLEEDING IS PRESENT.
- DEPENDENT ON ED MD EDUCATION AND KNOWLEDGE.
- BUT KNOW...LONG TERM PROBLEMS.

# ACKNOWLEDGEMENTS:

THANK YOU FOR ALLOWING US TO REPRODUCE FOR THE NORTH LYON COUNTY FIRE DEPARTMENT PARAMEDIC REFRESHER COURSE, IN PART OR IN WHOLE THE LAST ROLL CALL AND OTHER RESOURCES PROVIDED BY THE ONLINE RESOURCE LIBRARY HOSTED BY THE TRAINING INSTITUTE ON STRANGULATION PREVENTION.

- DR. SEAN DUGAN, CLINICAL DIRECTOR, SHASTA COMMUNITY HEALTH CENTER, MEDICAL DIRECTOR, CDAA, PAST MEDICAL DIRECTOR CCFMTC
- DR. BILL SMOCK, POLICE SURGEON, LOUISVILLE, KY

# RESOURCES

- CRISIS SUPPORT SERVICES OF NEVADA
  - 1-800-273-8255
  - 988
  - TEXT CARE TO 839863
  - SEXUAL ASSAULT SUPPORT SERVICES 775-221-7600

# RESOURCES

- DOMESTIC VIOLENCE INTERVENTION
  - LYON AND CHURCHILL COUNTY
  - [WWW.DVIFALLON.ORG](http://WWW.DVIFALLON.ORG)
  - 775-427-1500



# QUESTIONS?

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SANE-A SANE-P FNE

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