





#### Dying to Know: The Importance of Strangulation Inquiry in a Hospital Based Setting

#### Annie Lewis-O' Connor, PhD, MPH, NP, FAAN

Sr. Nurse Scientist & Director- Women's C.A.R.E Clinic Brigham and Women's Hospital & Harvard Medical School

#### Mardi Chadwick, JD

Director, Violence Intervention and Prevention Programs, Center for Community Health and Health Equity, Brigham and Women's Hospital

#### Disclosures

Neither presenter has any disclosure or conflict of interest to report for this presentation



# Objectives

- Understand the importance of non- fatal strangulation as a risk factor for future domestic violence homicide.
- Identify strategies used in one academic medical center to raise awareness and educate healthcare staff on the importance of strangulation inquiry in DV/SA cases.
- Discuss the significance of intra-disciplinary efforts in identification and intervention of non-fatal strangulation cases.
- Discuss the evidence and limitations thereof in diagnosis and treatment of non-fatal strangulation.



### STRANGULATION

Strangulation is a form of asphyxia characterized by closure of the blood vessels and air passages within the neck as a result of external pressure on the neck.







# Strangulation- How serious is it?

• Unconscious within seconds

• Death within minutes

• Eight pounds of pressure for 30 seconds will render the victim unconscious

• Brain death will occur in four to five minutes



#### Non-fatal Strangulation is an Important Risk Factor for Homicide of Women

 PURPOSE: examine non-fatal strangulation in IPV cases as a risk factor for major assault or attempted or completed homicide.

 DESIGN: A case control design was used to describe nonfatal strangulation among complete homicides and attempted homicides (n=506) and abused controls (n= 427).

Source: Glass, N., Laughon, K., Campbell, J., Block, C.R., Hanson, G., Sharps, P.W., & Taliaferro, E. (2008). Violence: Recognition, Management, and Prevention: Non-Fatal Strangulation is an important risk factor for homicide of women. The Journal of Emergency Medicine, 35(3), 329-335.



### Evidence

- Non-fatal strangulation was reported in 10% of abused controls, 45% of attempted homicides and 43% of homicides.
- Prior non-fatal strangulation was associated with greater than <u>six-fold odds</u> (OR 6.70, 95% Cl 3.91–11.49) of becoming an attempted homicide and over <u>seven folds odds</u> (OR 7.48, 95% Cl 4.53–12.35) of becoming a completed homicide.
- These results show non-fatal strangulation as an important risk factor for homicide of women, underscoring the <u>need to</u> <u>screen for non-fatal strangulation</u> when assessing abused women in emergency department settings.

Source: Glass, N., Laughon, K., Campbell, J., Block, C.R., Hanson, G., Sharps, P.W., & Taliaferro, E. (2008). Violence: Recognition, Management, and Prevention: Non-Fatal Strangulation is an important risk factor for homicide of women. The Journal of Emergency Medicine, 35(3), 329-335.



## **BWH Response- Informing Practice**

- Strangulation cases at BWH 2009 2012
- Case study:
  - 35 yr old female found at home unconscious brought into ED by EMS. Workup included: rule out head injury, toxicology, infectious disease, neuro or cardiac insult
  - 23 yr old brought to ED after a DV assault and choking episode
  - 25 yr. old- pregnant- brought to OB triage with abdominal pain. (+) disclosure IPV (+) Screen for choking
  - ~ Lessons learned





### Lessons Learned

- Non-fatal strangulation is a serious life threatening assault often committed within the context of domestic violence and sexual assault relationships
- Many patients will not report a strangulation unless asked specifically
- ~ Providers require training r/t: identification, documentation, work-up and intervention and follow-up
- ~ Low incidence- high risk event





#### <sup>TTAL</sup> Advancing Practice: Educational Opportunities

- ~ Traditional didactic opportunities
- ~ Yearly Program with Local and National Scholars
- ~ Credentialing (on line training) for all providers
- ~ Yearly competency Health stream
- ~ Huddles at bedside use to educate
- ~ Notification of high risk cases via emails
- ~ Keeping administration informed
- Use survey monkey to understand areas of improvement and opportunities for improvement
- ~ Use of Patient Advisory Councils
- ~ Conduct Quality Assurance/Reviews on ALL DV/SA cases

Current Past

#### Unknown

FY2009 = 14





# In Summary

- DV and SA cases **must** be screened for strangulation
- If pregnant- (> 20 weeks) admit
- Written protocol and documentation of history, assessment **must** be standardized
- Safety and Risk Assessment
- Patient Autonomy
- Opportunity- coordinating the expertise of many disciplines= BEST RESULTS



#### Outcomes

- ~ Jackie Campbell training (2010)
- ~ "Choking" added to physical abuse screen (2011)
- ~ Strangulation Protocol adopted (2012)
- ~ Improved interventions Case example
- ~ Case Huddles, Consultation
- Continued work on awareness of issue and best practices for responding to cases
- Improved communication amongst team members and across service lines and within community (ex. Pregnant patient)
- ~ Administration aware of high risk cases





# Thank you!!

#### For more information contact us:

Mardi Chadwick, J.D. mchadwick1@partners.org

Annie Lewis-O' Connor, PhD, MPH, NP <u>alewisoconnor@partners.org</u>