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 non-fatal strangulation among complete homicides and attempted homicides (n=506) and abused controls (n= 427).

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 six-fold odds** (OR 6.70, 95% CI 3.91–11.49) of becoming an attempted homicide and over **seven folds odds** (OR 7.48, 95% CI 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 **need to screen for non-fatal strangulation** when assessing abused women in emergency department settings.

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
Strategy

- Training
- Leadership and committee support
- Protocol
- Case reviews
- Data Collection
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
FY2009 = 14

<table>
<thead>
<tr>
<th>Year</th>
<th>Current</th>
<th>Past</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2010</td>
<td>N=94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY2011</td>
<td>N=166</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY2012</td>
<td>N=144</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY2013</td>
<td>N=103</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY2014</td>
<td>N=144</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY2015</td>
<td></td>
<td></td>
<td>N=62 (5 months)</td>
</tr>
</tbody>
</table>
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](mailto:mchadwick1@partners.org)

Annie Lewis-O’ Connor, PhD, MPH, NP
[alewisoconnor@partners.org](mailto:alewisoconnor@partners.org)