



Physical Anthropology Section – 2011

H10 Defining Intimate Partner Violence: New Case Studies in IPV

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After attending this presentation, attendees will be familiar with the most common trends of fracture associated with intimate partner violence (IPV), in particular the hierarchy of facial fractures and their types that are indicative of IPV.

This presentation will impact the forensic science community by presenting the most current data on patterns of skeletal injury common in cases of IPV and by illustrating the range, and characteristics of these injuries in three cases studies.

Women are approximately 4 to 5 times more likely to be victims of intimate partner homicide (IPH) than their male counterparts (Campbell, *et al.* 2007).¹ The major risk factor for IPH, regardless of whether the male or female partner is killed, is the presence of prior domestic violence. When analyzing human remains for evidence of chronic physical abuse, forensic anthropologists rely on a temporal range of trauma and the presence of specific types of skeletal injuries (Cook, *et al.* 1997; Galloway 1999; Marks *et al.* 2009).^{2,3,4} Likewise, in the majority of cases, physical IPV occurs over a long period of time resulting in a documentable history of soft tissue and/or skeletal injuries (Campbell and Glass 2009).⁵ Identification of IPV from skeletal trauma is critical, because knowing such information increases accurate reporting of IPV-related deaths, helps to mitigate abuse of future partners and children, and may assist in the identification of perpetrators. As first-incident IPV female homicides increase, it is critical that forensic anthropologists become aware of the patterns of injury, populations at risk, limitations of assessment, and their role in the identification of IPV during analysis of skeletal trauma. The following fracture guidelines may identify IPV (Juarez and Hughes, *in press*; Arosarena *et al.* 2009):^{6,7}

- 1) Most victims are female.
- 2) Most victims are involved in ongoing abuse, which may present as antemortem trauma to the skeleton.
- 3) IPV correlates statistically with peri-orbital fractures and intracranial injury.
- 4) Fracturing to the nasal bones is not unique to IPV and has been correlated with motor vehicle accidents, falls, and assaults by unknown or unidentified assailants.
- 5) Fracturing to the mandible and zygomatic complex is not unique to IPV and has been correlated with assaults by unknown or unidentified assailants.

Three known victims of IPH are examined for evidence of identifiable trauma associated with IPV. In two cases, clear evidence of antemortem trauma, both post-cranial and cranial exist, and in both instances this trauma is consistent with past and recent IPV. However, in the third case IPV-related trauma was only present perimortem. At the time of case analysis, the forensic anthropologists were not aware of the skeletal traumatic patterns often associated with IPV and, therefore, no suggestion for such a case was made.

References:

1. Campbell, J., Glass, N., Sharps, Phyllis W., Laughon, K., Bloom, T. (2007). Intimate Partner Homicide Review and Implications of Research and Policy. *Journal of Trauma and Abuse*, 8(3): 246-269.
2. Crandall, M. L., Nathens, A. B., & Rivara, F. P. (2004). Injury patterns among female trauma patients: Recognizing intentional injury. *Journal of Trauma Injury, Infection, and Critical Care*, 57, 42-45.
3. Galloway A. (1999). The circumstances of blunt forces trauma. In *Broken Bones: Anthropological Analysis of Blunt Force Trauma* edited by A. Galloway. Springfield: Charles C Thomas. 224-254.
4. Marks, M., Marden, K., Mileusnie-Polchan, D. (2009). Forensic Osteology of Child Abuse. In *Hard Evidence: Case Studies in Forensic Anthropology* 2nd edition. edited by D. Wolfe Steadman. New Jersey: Prentice Hall. 205-220.
5. Campbell, J., Glass, N. (2000). Safety Planning Danger and Lethality Assessment In Intimate Partner Violence: A Health Based Perspective (Eds) Mitchell, C., Anglin, D. Oxford University Press. New York 319-335.
6. Juarez, C. and Hughes, C. (In press). Investigating patterns of Injury: Identifying Intimate Partner Violence. In *Broken Bones: Anthropological Analysis of Blunt Force Trauma* 2nd edition. Edited by A. Galloway and VL Wedel. C.C. Thomas, Springfield IL.
7. Arosarena O, Fritsch TA, Hsueh Y, Aynehchi B, Huang R. (2009). Maxillofacial injuries and Violence Against Women. *Arch Facial Plastic Surgery*. 11(1):48-52.

Domestic Violence, Facial Fracture, Intimate Partner Violence