

Intimate Partner Violence and Sexual Assault: Clinical and Radiologic Findings

Monday 10:00-10:10 AM | RC208-06 | Room: E450A

PURPOSE

Intimate partner violence (IPV) and sexual assault (SA) are under-recognized entities in Emergency Radiology even though 1 in 4 women in the US experiences physical abuse or sexual assault by their intimate partner. We aim to study the demographics, clinical presentation, and radiologic findings in these patients.

METHOD AND MATERIALS

Patients referred to the domestic abuse (n=87) and sexual assault programs (n=35) from January to October 2016 were identified. Demographics, clinical presentation, and radiologic studies performed within 5 years of presentation were reviewed from the electronic medical record.

RESULTS

Majority of the IPV victims were female (95%) and African-American (40%), with a mean age of 34.7 (± 12.0) years. Almost all (97.7%) patients presented to the ED, presenting symptom was unrelated to IPV in 44.8%, and 83% endorsed prior history of violence. A total of 665 radiology exams were performed, for a median number of 4 studies per patient (IQR: 0-10; maximum=65). The most commonly performed exam was chest radiograph, followed by obstetric ultrasound (US), and musculoskeletal (MSK) radiographs. The common traumatic injuries were extremity fractures (n=6), nasal bone fractures (acute/chronic, n=4), orbital fractures (n=2), soft tissue injury (hematoma/laceration, n=7), and spinal fracture/compression (n=3). Other findings potentially related to violence were subchorionic hematoma (n=5), pregnancy failure (n=6), and intrauterine growth retardation (n=2). SA victims were younger (27.3 ± 7.7 years), majority female (91%), and African-American (46%). A total of 109 radiology exams were performed, for a median number of 4 studies per patient (IQR: 1.75-12.25; maximum=25). The most commonly performed exam was chest radiograph, followed by CT head, pelvic US and MSK radiographs. There were fewer traumatic injuries in this population; orbital wall deformity (n=1), soft tissue swelling (n=2), and spinal compression fracture (n=1).

CONCLUSION

A wide range of imaging studies are performed on IPV patients and radiologists can potentially play a role in early detection by identifying patterns of injury.

CLINICAL RELEVANCE/APPLICATION

Intimate partner violence is challenging to identify due to variable presentation and often coexisting psychiatric history; identification of radiologic patterns of injury may enable early establishment of care.