Case Report

Assessment of Musculoskeletal Injuries from Domestic Violence in the Emergency Department

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Domestic violence is one of the most common causes of nonfatal injury in women, with musculoskeletal injuries representing the second most prevalent manifestation of this form of violence. It is therefore of great importance that healthcare providers such as emergency department (ED) physicians and surgeons are able to recognize and assess these kinds of injuries. In this case report, a woman is described visiting an ED with injuries caused by a fall. Thanks to the knowledge and attention of the ED physician, the real cause of the injury was discovered. What appeared to be an unsuspicious accident was actually the result of intimate partner violence.

1. Introduction

Domestic violence is a serious public health and medical problem that is prevalent in all classes of our population. In Netherlands each year over 200,000 women are victims of domestic violence in one form or another [1]. An estimated 12% of the acute injuries of women are caused by domestic violence [2]. More than half of these female victims who are treated for these injuries visit an emergency department (ED) [3]. Three-quarters of the attending physicians would not recognize these cases as abuse related [4].

2. Case Description

A 47-year-old woman visiting the ED is complaining of heavy pains in her left forearm. She claims to have fallen against a wardrobe. Examination by the attending ED physician reveals a purple-blue discoloration of the left forearm. He also notices a yellow discoloration around the left eye and forehead. This discoloration possibly dates from an earlier time. X-rays show a fracture of the forearm (both radius and ulna). When the physician expresses his doubts about the cause of the accident, the woman then admits being beaten and abused by her husband frequently. The fracture of her forearm was caused by a blow from a baseball bat and the “black eye” by a punch to the face at an earlier time. Further physical examination reveals extensive fingertip bruising caused by hefty grasping of the arms, back and buttocks, outline hematomas caused by beating with a round and cylindrically formed object (wooden spoon), and hematomas caused by beating with a looped cord.

3. Discussion

Previous studies have shown that musculoskeletal injuries represent the second most prevalent manifestation of intimate partner violence [5, 6]. It can be assumed that most ED physicians and (orthopedic) surgeons are treating victims of family violence, knowingly or unknowingly, in their practices [7–9].

In this case we observe a conscientious ED physician. Nevertheless even with visible exterior injuries physicians often overlook the possibility of abuse related causes. This is a serious matter because in Netherlands alone each year more than 80 women die as a direct consequence of domestic violence, whereas early recognition might have avoided...
the fatal outcome in most cases [1]. This situation has not been changed for the last decade [10, 11].

Reasons for not recognizing the abuse by physicians are often explained by lack of education and training, playing down the severity of the injury, fear of being mistaken, not wanting to be the policeman, not knowing the proper referral agencies, and lack of time. Bhandari et al. concluded from their study, in which 186 orthopedic surgeons participated by responding to a questionnaire, that discomfort with the issue and lack of education have led to misconceptions among Canadian orthopedic surgeons about intimate partner violence [5].

It is also commonly known that many women (>60%) are reluctant to speak of the violence because of shame and fear and do not dare speak of the true nature of their injuries [12, 13]. It is therefore the reason that the “fall from the stairs” or the “fall against the wardrobe” is often used as the reason for the injury [14]. More than half of these women would offer honest answers to the questions if the physician had only asked them directly. This is an important factor for opening the problem for discussion which stops the violence in 50% of the cases [15]. Another research has shown that in 72%–93% of the patients questioned by the physician over domestic violence where there was none in question those people reacted positively, expressing words of understanding, conscientious behavior, and agreeing it was advisable to subject victims to this line of questioning [16, 17].

When assessing injuries, one should always question whether the cause was accidental or intentional. Many accident injuries are caused by a fall, jolt, or jab. Preferential spots are the forehead, chin, knees and elbows, the inner side of hands and shins, and areas where bone structure exists low beneath the skin as in spinous processes and crista ilica. Accidental injuries can also be caused by improper use of sharp utensils and machines. One-third of the injuries are beneath the skin as in spinous processes and crista ilica. Preferential spots are the forehead, chin, knees and elbows, the inner side of hands and shins, and areas where bone structure exists low beneath the skin as in spinous processes and crista ilica. Accidental injuries can also be caused by improper use of sharp utensils and machines. One-third of the injuries are from the stairs” or the “fall against the wardrobe” is often used as the reason for the injury [14]. More than half of these women would offer honest answers to the questions if the physician had only asked them directly. This is an important factor for opening the problem for discussion which stops the violence in 50% of the cases [15]. Another research has shown that in 72%–93% of the patients questioned by the physician over domestic violence where there was none in question those people reacted positively, expressing words of understanding, conscientious behavior, and agreeing it was advisable to subject victims to this line of questioning [16, 17].

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4. Conclusion

Knowledge and early recognition of inflicted injuries of domestic violence should be improved among healthcare providers such as (orthopedic) surgeons, ED physicians, and GPs. Domestic violence remains a difficult subject to discuss for the victim as well as the physician. Nevertheless, discussing the matter is the only way to make strides with this problem. This can help victims out of their isolation so they can be adequately helped and can also save lives for some. If physicians are not confident in critically examining injuries, they should ask professionals like forensic physicians for help. One must realize that ignoring the problem is even more harmful.

Conflict of Interests

The authors declare that there is no conflict of interests regarding the publication of this paper.

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