

# THE AFTERMATH OF ATTACK

## Pattern, Severity and Aetiology of Injuries in Victims of Assault

The following extract is taken with the author's permission from a study by Professor J P Shepherd, et. al. (1) in which 539 adult victims of assault attending a major city centre Accident and Emergency Department in 1986, were interviewed and examined. Grateful thanks for permission to reproduce it here.

It was discovered that there was a very high incidence of facial injury; 83% of all fractures, 66% of all lacerations and 53% of all haematomas were facial, with the upper limb being the next common site of injury (14% of all injuries).

These results also highlight differences in wound patterns in male and female victims. For example, proportionately more men sustained lacerations. This finding is consistent with cause of injury, in that proportionately more men reported assault with sharp weapons or drinking glasses. Whilst there have been few comparable investigations reported in the literature, Gayford (2) reported that periorbital haematomas, and the use of blunt instruments, were common in wife-battering. It may be that a male assailant tends to choose a blunt weapon in preference to a sharp one when assaulting a woman because he does not wish to cause permanent disability, or because he believes that he does not need a weapon in a conflict with a woman because he is stronger. Alternatively, in assaults involving only men, sharp weapons and glasses may be used to gain advantage over an opponent of roughly equal strength, thereby producing more lacerations. The findings of Gayford's study of battered wives (2) are inconsistent in this respect. Gayford suggests that men spontaneously use any weapon which is to hand, and cites saucepans and other kitchen utensils because many assaults take place there. Clearly, there is an element of weapon 'selection' in domestic violence, because knives are also readily available in the kitchen, yet are used infrequently. If the hypothesis that little or no injury is intended is correct, then the observation that battering husbands appear particularly polite and concerned when they bring their injured wives to hospital (2) may simply reflect their true feelings of remorse and not represent an attempt to conceal the cause of injury.

Comparison of injury and type of

weapon showed that attacks with fists or a combination of fists and feet, gave rise to fractures significantly more often compared with attacks with blunt weapons. This may reflect the greater momentum of fists and feet compared with most blunt objects. These findings confirm that expert witnesses can, at best, give an indication only of likely causes of injury, and cannot be expected to give categorical opinions concerning precise cause. (However, further work is necessary to differentiate between incised wounds caused by sharp weapons and other types of laceration in adult assault victims. Accident and Emergency staff should record the characteristics of wounds so that correlation with an alleged weapon can be made later - particularly in relation to compensation claims.)

These data indicate that the face is a preferred 'target' in assault, or at least is more vulnerable. Clothing provides some protection for the trunk and limbs, and may partly explain the preponderance of facial injuries. Upper limb injuries, second in frequency in this study, may reflect a tendency on the part of the victims to defend themselves by using their arms, or simply that 'victims' struck their assailants and injured themselves in so doing.

Clearly, the distinction between 'victim' and 'assailant' may be difficult and in relation to night-time urban violence involving males, the term ~participant~ will be more appropriate.

The psychological factors underlying the reasons for the selection of each 'target' area are largely unknown, though an investigation into the causes and importance of this behaviour might provide a useful insight into conduct during a fight or assault, and might even identify behaviour which has been 'learned' from television and other media violence.

In this study, left-sided facial injuries were more frequent than right-sided, and this almost certainly reflects that most assailants are right-handed (3). Facial injuries were similarly distributed in both men and women, except that nasal injuries were less frequent in women. This may reflect that, for some underlying psychological reason, male assailants wished to avoid producing nasal deformity in women, over and above their tendency to avoid striking the face in the first place.

The application of the injury severity scale (Table 1) demonstrates that in those victims who can remember this detail, the number of blows broadly correlated with outcome.

For example, those reporting less than three blows were more likely to have a fracture; the longer an assault continued, the greater the likelihood of severe injury.

Interestingly, data concerning falls tended to confirm this: fewer of those who fell had multiple injuries compared with those who did not fall, who were presumably more likely to continue to be injured. The exceptions were victims who were subsequently kicked, who were more likely to require admission.

In this study, one in six victims were admitted to hospital - a similar proportion to that described in a study of victims known to the police (4). In an Accident & Emergency department with 50,000 new patient attendances per annum, less than two admissions per week does not represent a substantial drain on resources compared with other categories of patient. Nevertheless, this admission rate emphasises that a minority of patients are seriously injured.

### References

- (1) Shepherd, J.P., Shapland, M., Pearce, N.X., & Scully, C., *Pattern, severity and aetiology of injuries in Victims of Assault* Journal of the Royal Society of Medicine, Vol. 83, February 1990 Pp. 75-78.
- (2) Gayford J.J., *Wife battering: a preliminary survey of 100 cases*, British Medical Journal, 1975; 1:194-7
- (3) Shepherd, J.P., Al-Kotany, M., Subadan, C.J., & Scully, C., *Assault and facial soft tissue injuries*, British Journal of Plastic Surgery, 1987; 40:614-19
- (4) Shepherd, J., Willmore, J., Duff, P.R., *Victims in the criminal justice system*, Aldershot: Gower, 1985:97-108.

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**Table 1**

### INJURY SEVERITY SCALE

- Category I: One laceration or one haematoma
- Category II: Multiple soft tissue injuries
- Category III: One fracture
- Category IV: One fracture and soft tissue injury elsewhere
- Category V: Multiple fractures

Source: Shepherd, J.P., et. al.(1)