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Muggings and Assault

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Abstract

The term "mugging" has come to be accepted as synonymous with the type of damage which is inflicted by thugs on members of the community. In fact it is the act of attacking from behind or seizing an individual by the throat. To "assault" is to attack violently but this need not be entirely physical and may indeed be at least in part verbal, as for example in an argument.

Regrettably the incidence of both is increasing year by year, and not infrequently may endanger life. The circumstances relating to muggings and assault are many, but fall essentially into two groups — the provoked attack and that which is unprovoked. There tend to be three distinct patterns of attack — "man-to-man" contact, that which falls into the category of "gang warfare" in which several individuals attack another group, while gang assaults on individuals are also constantly in the common press. Young people require avenues of expression and if this is improperly provided for, or inadequately controlled, it can lead to violence. Every citizen has a responsibility to the community in which he or she lives and there can be no doubt that they can often discourage such aspects of life as juvenile delinquency and violence by providing facilities and amenities designed to combat such socially unacceptable behavioural patterns. Indiscreet use of the tongue, facial muscles of expression, and digital signs may individually or collectively predispose to evoking physical response from others. Understanding of these precipitating factors and conscious effort to avoid them by whatever means are available will obviously reduce the number of cases of assault. Only a small proportion of such cases reach either the courts or the hospitals and it can be assumed that those which do are of the more serious type.

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MUGGINGS AND ASSAULT

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The term "mugging" has come to be accepted as synonymous with the type of damage which is inflicted by thugs on members of the community. In fact it is the act of attacking from behind or seizing an individual by the throat. To "assault" is to attack violently but this need not be entirely physical and may indeed be at least in part verbal, as for example in an argument.

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The injuries which may be sustained range from the trivial to more extensive. Some, as already mentioned, may endanger life itself. In addition,

it is essential to appreciate that any part of the body may be involved.

Assaults affect both sexes. Age is of little concern, even the infant is exposed in the now universally acknowledged "battered baby" syndrome, while at the other extreme of life it is regrettable, but factual, that an increasing number of elderly over the age of 70 years are attacked, robbed and/or sexually assaulted. Robbery may be the motive. Many attacks are precipitated by alcoholic over-indulgence, while others are apparently motiveless.

The object of this article is to draw attention to the facial injuries, but it is imperative that assault patients should be examined in the greatest of detail in order to ensure that no injury is overlooked. The most common sites are head, chest, limbs, abdomen and genitalia. Damage to genitalia in the male of the species is frequent. The mode of attack is to get the victim on the ground by whatever means and then to "put in the boot" which is the term used to indicate the use of the boot to kick the head and the crotch alternately. Under this barrage the hands of the victim will be directed fleetingly up and down in an attempt to protect the individual's person. This strengthens the belief that attention to detail is imperative with the recognition of bruising in particular on the backs of hands and extremities; namely the face and head, pelvis and genitalia.

Society is aware of the need to reduce crime to a minimum and to ensure that those who indulge in crime are duly punished for so doing. Thus, if detailed medical evidence is obtained, the greater are the chances of bringing about a conviction and of meting some with the correct punishment. Case-notes must therefore be detailed, bruising should be systematically committed in writing, where possible, and photographed when required for presentation in court.

The main features to be attended to in the



Example of Facial Injury

emergency care of assault victims are the four C's, namely:—

- A. Control of Respiration
- B. Control of Haemorrhage
- C. Control of Shock
- D. Control of Fractured Fragments

A. Control of Respiration

Of all the causes of respiratory embarrassment, the aspirations of blood, secretions and/or vomitus is potentially the most dangerous and immediate efforts must be taken to ensure the maintenance of the airway. The patient should be placed in the semi-prone position, that is on the side with the underarm pulled through and the upper leg flexed,

while the head is supported. All debris should be removed from the mouth and oro-pharynx. A patent oral or naso-pharyngeal airway may be inserted.

B. Control of Haemorrhage

Haemorrhage is fortunately not normally a serious complication of facial injuries although the immediate blood loss, particularly in cases of severe middle-third fractures of the face, may necessitate transfusion. In the elderly the combination of physical damage and haemorrhage may create a partial obstruction. Even a minimal hypoxia may lead to irreversible cardiac failure if allowed to persist. Knowledge of digital pressure points in the face and head may well prove of value in the control of local haemorrhage, as for example compression of the superficial temporal artery against the skull in front of the tragus of the ear; the digital pressure over the mandible at the anterior border of the masseter where the facial artery crosses on its upward path; and the bidigital pressure of the lips to control the superior and inferior labial arteries.

C. Control of Shock

Shock is experienced to a greater or lesser extent by all trauma victims and presents in one of two forms — vaso-vagal or neurogenic shock and that due to acute blood or plasma loss. In both the blood pressure is reduced significantly. In neurogenic shock the systolic and diastolic pressures are affected, while in hypovolaemic shock the systolic pressure is usually reduced to not less than 60 mm of mercury. The pulse rate in the former is slow and the skin pale but often warm, while in the latter the pulse rate is fast and the skin cold and clammy.

Blood loss is not always apparent, witness the "hidden" haematoma associated with fractures of long bones, particularly the femur. Similarly, intra-abdominal haemorrhage from the liver spleen and kidneys may be responsible for both acute and chronic blood loss. Two other common sources of fluid loss are worthy of note, namely those related to vomiting and sweating. Such factors influence the type of fluid replacement and the rate at which such fluids are given. Blood examination including the haemoglobin level and cross-matching, in case of transfusion, should be

carried out as soon as possible and supplemented thereafter by electrolyte studies and measurement of blood gases so that base lines can be established upon which to assist subsequent treatment.

D. Control of Fractured Fragments

In the "battered baby" syndrome facial injuries other than bruising are infrequent, but in the severe case the lower jaw can be fractured. The elasticity and the shape of the mandible in the infant preclude all but the most serious damage when, should the temporo-mandibular joint be involved, subsequent development of the lower jaw may be adversely affected creating facial deformities and interference with masticatory efficiency.

The facial injuries sustained by the teenager and those in the older age groups range from bruising, loss of teeth, cuts and lacerations, to the most extensive facial fractures involving joints, sinuses and even brain. Blunt objects — the fist, boot, bricks and hammer are examples of some of the more common of these which may give rise to the most grotesque facial injuries — such damage may leave permanent scars of both mind and body.

The treatment of these injuries demands attention to detail. As has already been indicated, the primary responsibility is to maintain life and every effort should be directed to the immediate resuscitative measures. The principles of repair in the facial region are to reconstruct the facial skeleton and then restore the soft tissues as carefully and atraumatically as possible. Such efforts may require repeated operations necessitating hospital admission and follow-up appointments.

The eyes are protected by the forehead, the nose and the malar prominences. Damage to the latter therefore requires operative interference to restore this important part of the triad to its correct degree of prominence. Indeed the aim in all facial fracture treatment is to reduce and immobilise the fractured fragments as near to the anatomical position as possible, consistent with function. This last observation is important as the very young and the very old resent rigid fixation and may even suffer from it.

Intra-oral wounds are obviously exposed to potential contamination from saliva, foreign bodies, debris and food. Nasogastric feeding has

an increasing part to play in ensuring adequate dietary intake on the one hand and assisting in maintaining oral hygiene on the other. Improved instrumentation, anaesthesia and therapeutic agents, in particular the antibiotics, have greatly assisted the surgeon in his efforts to restore those who have been seriously assaulted to normality. Alas, too frequently this challenge proves to be impossible and even when the body is restored, the damage to the mind may be irreparable.

Many of the operations require a "team" approach in which the skills of various surgical disciplines are utilised. This is one of the reasons whereby the standards have improved and the end results compare favourably with those in any other part of the world. The development of this "team" approach with such as the modern sophisticated oral, maxillo-facial and plastic surgery unit has largely taken place since the Second World War. The excellence of such services is the envy of the free world and is a fitting testimony to the National Health Service — a ready condemnation of its many critics.

injuries has been alluded to in so far as maintenance of life is concerned and it has been stressed that in this the control of the facial fracture fragments seldom takes precedence. Better by far to have a live patient with a "dish-face" deformity, than perfect reduction with fixation which requires to be viewed in the mortuary.

Early measures to effectively control facial lacerations and/or fractures are designed towards closing soft tissue injuries in layers with as satisfactory a cosmetic result as possible while supporting the facial skeleton. The amount of interference is entirely controlled by the general state of the patient. In the conscious state dentures, particularly partial dentures, if intact, may afford considerable support and should not be removed. In the semi-conscious or unconscious patient, however, all loose foreign bodies should be removed in the interests of safety. A simple crepe supporting bandage may be applied. This should never be tight as attempts to affect complete closure with the teeth in occlusion only causes pain and acute discomfort. The barrel bandage which is widely supported by first-aid workers is mentioned only to be deprecated as it so often allows the chin to be pulled backwards, a particularly dangerous situation and most likely

to happen when the patient has bilateral fractures of the lower jaw involving the premolar regions. In such circumstances, the muscles of mastication attached to the inner aspect of the mandible allow the anterior fragments to be pulled backwards and downwards thereby allowing the tongue to be depressed and mechanically occlude the airway. Active steps can be taken to control this effect, as for example by the insertion of an oral or a nasopharyngeal airway.

A very substantial number of assault and mugging injuries have facial involvement. In some ways they epitomise the horrific permanent disabilities which may ensue — brain damage, which in its most severe form may transform a healthy well-orientated individual to that of an intellectual vegetable; gross facial scarring which may cosmetically be beyond the salvation of the surgeon's knife; loss of sight; loss of hearing; loss

of the senses of taste and smell — frequently underestimated handicaps, particularly in the insurance claim; loss of teeth with the associated effect on appearance and function. Indeed the potential damage is endless and so much of it is so totally unnecessary.

Surely there is a need for greater public awareness of a section of society which not only exists but increases yearly, indiscriminately attacking and maiming as they proceed through life. Every member of the public has a moral responsibility to assist the law in containing crime. This demands vigilance at all times and the early recognition of circumstances which are getting out of hand. Thus individual and collective violent behavioural patterns are more likely to be more effectively controlled.

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