Sport injuries in a private general practice

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IN recent years there has been an increasing interest in the diagnosis and management of sport injuries. Whilst this has revolutionized the management of injuries sustained by professional and top-class amateur athletes, little attention has been given to the treatment of sport injuries amongst the general public who have to rely mainly upon the services of the general practitioner. This is a retrospective survey to determine how large a problem this may be and if specialized services should be made available.

Method

All injuries sustained whilst undertaking a sporting activity between 1965–69 were reviewed. The practice is entirely private and is situated in a northern industrial area, although some of the patients live in the surrounding rural area. The social class of the patients is shown in table I. The total number of patients and the age–sex ratio is not known.

Results

During the period under review there were 721 injuries following accidents of which 61 were sport injuries. The 61 cases involved 43 males and 18 females. The incidence of injuries in relation to the place of injury was—home, 333; street, 188; work, 139; sport, 61.

The incidence of injuries in individual sports is shown in table II.

TABLE I

Social class	*Per cent*
I	*8*
II	*28*
III	*46*
IV	*12*
V	*6*

TABLE II

Soccer	24
Gymnastics	5
Horse-riding	5
Skiing	5
Rugby Union	4
Swimming	4
Basket-ball	3
Hockey	3
Squash	3
Go-kart racing..	2
Fishing	1
Skating	1
Tennis	1

The types of injuries and the numbers treated entirely in the surgery is shown in table III. Of the 42 patients treated only in the surgery, 12 were referred to a hospital x-ray department.

Of the 22 cases of joint injury in the series, 19 were treated entirely by the general practitioner. These consisted of ligamentous injuries or traumatic effusions of the knee and ankle joints. The remainder consisted of two cases of meniscus injury and one subluxation of the achromio-clavicular joint and these three patients required hospital treatment.

The 14 fractures in the series occurred in relation to the tibia and fibula (4), radius

and ulna (4), nasal bones (3), clavicle (2), phalanx (1). A fracture of the thumb and a greenstick fracture of the radius were the only fractures treated entirely in the surgery.

Twelve patients presented directly to a hospital casualty department and these were

TABLE III

	Number	*Number treated only in surgery*
Joint injuries	22	19
Fractures	14	2
Muscle and tendon injuries ..	12	12
Head injuries	4	2
Back injuries	3	3
Other injuries	6	4
TOTAL	61	42

mainly the more serious cases of fractures and joint injuries. Nine of these required hospital inpatient treatment.

The average time between the injury and the first consultation of the cases treated only by the general practitioner was seven days. Three quarters of these required only one consultation and the remainder only two consultations.

Discussion

Sport injuries are the least common form of injuries seen in general practice. In this survey, sport injuries were 8·5 per cent of the total. This is similar to the 11·32 per cent reported by McGregor[1] in his practice.

A remarkably extensive range of sports was involved but soccer was by far the commonest cause; 60 per cent of the injuries in the male. This is to be expected in a country where soccer is the national sport. There is no evidence indicating the amount of soccer played by patients of the practice but it is probable that the next most common sports causing injury, gymnastics, skiing and horse riding are amongst the least popular sports. This would suggest a high injury rate for these sports.

The majority of injuries involved the limbs. Muscle, tendon and joint injuries were 59 per cent and fractures 23 per cent of the total injuries. This is a surprisingly high incidence of fractures but it is probable that several trivial injuries were not presented to the general practitioner. There was only one instance of laceration.

There is little literature on this subject in general practice. Arnold and Steele[2] reported a series of recreational injuries seen in a general practice situated in a Canadian holiday area. They reported 16 per cent fractured limbs in the summer and 8 per cent in the winter. There were 36 per cent of lacerations in the summer, the largest form of injury for the period, and 23 per cent in the winter. This is in great contrast to the present series. The lacerations were mainly caused by sharp instruments such as axes and knives, by falls or thrown stones and physical agents such as old barbed wires and were mainly campers who are not included in the present series.

The majority of patients were treated in the surgery and required only one consultation. In none was other than simple treatment required. However, specialist advice was generally required for fractures. In view of the average delay of seven days before

consultation, it would appear that the general practitioner's rôle is that of reassurance. The patients seemed to be able to recognize the more serious injuries which they reported directly to a hospital although a general practitioner was always available.

Conclusion

It seems that sport injuries are not a major problem in an urban general practice. The general practitioner is mainly involved with minor injuries which require no specialized treatment and require little of his time. The more serious injuries are usually recognized by the patient and presented directly to a hospital casualty department.

REFERENCES

1. McGregor, R. M. (1969). *The work of a family doctor.* Edinburgh and London. E. & S. Livingstone. P. 255.
2. Arnold, I. M. F. and Steele, R. (1968). *Canadian Family Physician*, **14**, 21.