

UPPER LIMB INJURIES ASSOCIATED WITH ROCK CLIMBING

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Four cases of upper limb injuries secondary to rock-climbing or training for rock climbing are presented. All four cases had diagnosis and treatment delayed because of unawareness of the range of injuries seen in high grade rock climbing.

INTRODUCTION

Injuries associated with modern competitive sports are common due to increasing demands for 'excellence' and intensive training schedules. In the more common sports such as football (Norfray et al, 1980), running (Williams, 1979) and cycling (Weiss, 1985) much information is available to the amateur sportsman on the safest and most efficient way to train and most doctors with an interest in sport are aware of the range of injuries to be expected. In the less common sports a different range of injuries occurs; we describe four cases of injury associated with training for high grade rock climbing.

CASE REPORTS**Case 1**

A male aged 21 years developed severe pain on movement of both arms. Abduction was limited to less than 30° extension and flexion to less than 25° in both shoulder joints. He was investigated by his general practitioner for inflammatory joint disease with negative results. The cause was eventually identified as a traumatic injury to both shoulder joint capsules following intensive training on a "Bachar Ladder". The use of this equipment involves jumping for rungs on an overhanging ladder whilst the body swings free; consequently the whole body weight is taken alternately on each shoulder joint.

Case 2

A male aged 24 years developed swelling and tenderness over both wrist joints. Again he was investigated for inflammatory joint disease. The final diagnosis was of traumatic tendonitis following weight training involving repetitive wrist dorsiflexion against resistance.

Case 3

A male aged 19 years experienced severe pain in the index finger of his right hand following a period of training on an

indoor climbing wall. Avulsion of the terminal insertion of flexor digitorum profundus, secondary to an attempted one arm pull up was diagnosed.

Case 4

A male aged 26 years developed pain on finger flexion in his non-dominant right hand following a climbing trip. He was referred to a consultant rheumatologist who investigated for inflammatory joint disease before diagnosing traumatic tenosynovitis of the flexor tendons.

DISCUSSION

In rock climbing the more traditional injuries such as broken limbs, head injuries or abrasions, due mainly to an increase in the quality and safety of equipment, are quite rare. The majority of modern rock climbers, however, partake in gym or climbing wall-based training during the winter months and consequently training-related injuries are becoming commoner. Injuries seem to be mainly confined to the upper limb. The incidence is likely to increase as more people take up climbing as a pastime. Recently, in Europe, speed climbing competitions with large financial rewards for the competitors have been started and these will probably be introduced to Britain in the near future.

The four cases described above were obtained from a small personal survey by the authors and probably underestimate the overall incidence of these often severe injuries. In all cases the diagnosis and eventual treatment was delayed due to an unawareness of the type of injury which may be sustained by rock climbers.

References

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