CYCLING INJURIES

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It is not intended to enter into a detailed discussion of the diagnosis and treatment of individual cycling injuries as the injuries that one is likely to see are not the exclusive prerogative of the cycling fraternity. They include practically every known orthopaedic lesion and cover a spectrum of disability ranging from the trivial to the fatal. It is much more important to discuss the various possibilities, in general terms the cause and prevention of cycling injuries.

At the outset, it must be emphasised that, to be of any value, medical assistance must be in the right place at the right time and this implies - especially when dealing with road racing - that the medical attendant must know more than a little about the sport in question.

A) INCIDENCE OF INJURY: This is unpredictable. As far as serious injury is concerned, the solitary case is not as common as a spate of injuries following upon a pile-up. This is particularly the case in road-racing for reasons that will be given later.

B) TYPES OF INJURY
   1) Severe grazing and gravel rash.
   2) Injury to bony prominences.
   3) Friction burns in track events.
   4) Saddle sores.
   5) Pain and/or accumulation of fluid in the knee joint.

All these injuries are extremely common but, from the medical standpoint, are of a trivial nature. Less common but much more severe are the following:-

   6) Fracture of long bones.
   7) Fracture of clavicle.
   8) Fracture of skull.

The medical personnel are also likely to encounter a miscellany of minor injuries; strains and sprains, foreign bodies in the eye. Although it is unlikely to be encountered during the Commonwealth Games, it is also worth remembering the condition referred to by the cyclists as the 'knock' or the 'hunger knock' - a state of severe exhaustion and collapse probably attributable in some degree at least to hypoglycaemia.

C) CAUSES OF INJURY
   1) Speed: On a steep descent cyclists will travel faster than a car and,
although estimates of the exact speed achieved vary, 40-60 mph is a distinct possibility.

2) **Road Conditions:** Although the road-racer can maintain these speeds on a relatively straight stretch of road, sudden sharp twists on bends or poor road surfaces can easily lead to loss of control and a serious accident.

3) **Exhaustion:** With the onset of fatigue, reflexes become poorer and the standard of riding tends to fall.

4) **Wheels:** Serious pile-ups are very often due to wheels or pedals touching when the cyclists are riding in a bunch. This can occur at any stage in the race, but is often precipitated by one of the above causes; excessive speed, poor road conditions or exhaustion.

5) **Other Road Users:** Road-racers are extremely competent at handling their machines and it is fair to comment that in accidents involving racing cyclists and other road users the blame can be laid at the door of the latter group in the vast majority of cases. Fortunately the circuit will be closed to motor vehicles during the road race at the Commonwealth Games but there is still the danger of spectators, specially children, dashing onto the road in front of rapidly-moving riders.

D) **PROPHYLAXIS**

1) **Fitness & Skill:** Accidents are less likely to happen to the completely fit on the very skilful cyclist and both of these qualities should be present in the vast majority, if not all, of the competitors in these events.

2) **Head-guard:** It is to be hoped that every team manager will ensure that his cyclists observe the rules at all times by wearing adequate head protection.

3) **Blood-grouping:** The blood-group every competitor should be known before the event starts. This knowledge can be of immense help in an emergency and may prevent a severe accident becoming fatal.

4) **Tetanus Immunisation (A.T.T.)** If relatively minor wounds become contaminated with the Tetanus bacillus, tetanus is liable to occur and death is the outcome in many cases, despite modern antibiotics. It seems incredible that cycling authorities, who do insist on competitors knowing their blood-groups, do not also make tetanus immunisation mandatory.

E) **TREATMENT**

1) **General Measures:** Once again it must be stated that serious injuries may occur and that several cyclists may be injured simultaneously. With this in mind the main recommendatory would be:

   a. Medical cover must be allocated with some foresight so that the most dangerous spots are covered at all times.

   b. Since the most important task is to make a rapid assessment of the injury the use of non-medical personnel is limited in the first instance.

   c. It would be preferable to have at least 2 ambulances available so that one would be on location at all times and would be available as a mobile emergency treatment room.
2) **Psychological Measures:** Because of the speeds involved, cyclists are very unwilling to lose time by submitting to unnecessary therapy during the event. The most acceptable measures in most instances are an accurate assessment and confident re-assurance. Moreover, by adapting this approach, one keeps one's resources free to deal with the major accident which can happen at any moment.

3) **Specific Measures:** As we have already stated, these will vary with the nature of the lesion. A point worth mentioning, however, is that cyclists do make a habit of shaving their legs which, of course, facilitates immensely the task of dealing with the extensive grazes which they are likely to acquire.

In conclusion, one's approach to a cycle race should therefore be to go along hoping that nothing will happen but prepared for almost any eventuality.