CYCLING INJURIES WITH SPECIFIC REFERENCE TO EVENTS IN THE COMMONWEALTH GAMES

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SPECIFIC INJURIES

The cyclist puts his energies into a machine, and this machine controls his muscle movements within a quite limited range so that even with all out effort or with the onset of fatigue the muscles are grooved along a controlled path. Consequently, muscle injury specific to cycling is not very significant. The commonest complaints are almost entirely confined to the lumbar region and the knees.

CAUSES AND CURES

The back pains are mainly caused by these muscle groups acting as fixators, being in tension for long periods and this can be aggravated by a cyclist's preference for a long 'fast' looking handlebar extension which dictates an over extended position along his bicycle. The road racing cyclist has the further case that in wet weather his lumbar region is constantly sprayed for hours at a time, with cold water thrown up by his own back wheel, for racing bicycles for safety reasons do not have mudguards. The muscles are quite often fibrositic and the habit of even experienced racing men of standing about in damp clothing ensures that these muscles remain so. Massage and heat usually bring relief, and trunk mobilising exercises may help in muscle spasm. Knee pains are usually caused by strained tendons or ligaments and faulty position on the bike is the most likely cause. These faults are one or a combination of the following:

1. Saddle too low.
2. Badly fitted shoe plates.
3. Bent crank or pedal spindle.
4. Pedals too narrow.

An experienced coach can locate the faults and the knee trouble normally clears within a short time.

A further complaint, and this complaint is peculiar to horsemen and to cyclists, is saddle sores. There are one or several small boils over the area in contact with the saddle, and cause a great deal of discomfort. The victim is often forced into trying to take some of his weight off his saddle in an attempt to ease the pain. When these efforts have to be maintained for several hours of a race, the onset of fatigue is very greatly hastened. Personal hygiene is sometimes at fault, but more often they are caused by racing in wet conditions, when grit laden water, thrown up by the wheels, causes friction, damages the

skin and allows infection. Certain positional faults can also be contributory and here again a good coach can verify these.

INCIDENCE OF INJURIES

At the Commonwealth Games the medical forces' greatest task for cyclists will be the treatment of injuries due to accident either during training or during actual competition. These injuries may well put the greatest strain on the service, not only as far as numbers are concerned but also due to the severity of the injuries, as accidents occur when the cyclists are travelling at high speeds.

To illustrate these last points, the cycle road race will be contested by 60 to 80 riders in a massed start event. The average speed of the event will be around 25 m.p.h., and when it is considered that the race circuit is only 3 miles long and climbs steeply uphill for half that distance, one can guess the speed of the descent required to maintain this 25 m.p.h. average speed. Imagine then a group of 80 cyclists swooping down a fairly narrow and winding hill at 35 to 45 m.p.h. and one will realize the small margin for error which exists. A puncture, two wheels touching or some other slight mishap can have disastrous consequences. The race will cover more than 30 laps of this 3 mile circuit, so a few pieces of sticking plaster will not suffice. Should the day be wet, the efficiency of the brakes is very much reduced and the danger of skidding is increased, so that the likelihood of accident is trebled.

The main deployment of the first aid teams might best be from the slope of descent to the finishing straight as this will be the most dangerous sector of the circuit. Also, a medical team should be in attendance when the circuit is in use for training.

At the Velodrome, there is a 250 metres track with 44 degrees bankings. This is the venue of the sprinters who can be expected to cover the last 200 metres of their sprint at over 40 m.p.h. They will be mounted on bicycles with 4 ounce tyres - - - - tyres of silk with only the thinnest film of rubber for a tread, containing an air pressure of over 100 lbs. a square inch. Should one of these tyres burst whilst a rider is sprinting a very serious accident can occur, and there will most likely be bad friction burns through sliding along the track.

The events to be contended at the tracks are sprints, tandem sprints, kilometre time trial, Individual Pursuit and 10 miles scratch.

The sprints are "match sprints", that is, between two contestants only,

so that quantitatively these should be coped with easily. The Tandem Sprints will obviously double the problem.

In the Individual Pursuit and the Kilometre time trial, the possibility of accident is remote, although the danger through puncturing is always present. The 10 mile scratch will see many cyclists on the track, racing for more than 50 laps, so once again, as in the Road Race, the involvement of many cyclists in a pile up is a distinct possibility. Remembering that the track is only 250 metre around, one can realise that the leaders will soon catch up with the tail-enders who are usually the less experienced and less skilled riders. A dangerous situation is created when the very fast moving leaders are overtaking the slower groups.

During training sessions at the Velodrome considerable numbers will be on the track at one time so that the danger of spills is very real. Perhaps even more hazardous conditions will prevail, as riders tend to be less careful or concentrate less. Therefore an adequate first aid team should be present at all training sessions.

SUMMARY

- (a) Injuries specific to cycling are not very common nor serious.
- (b) During the Road Race and the 10 miles Scratch Race the possibility of a pile-up involving a number of cyclists is always present.
- (c) The descent in the Road Race circuit will be the danger sector.
- (d) First aid service should be available at both road race circuit and at velodrome during all training sessions.
- (e) Although crash hats are mandatory in track racing, this is not the case in road racing, unless it is made a condition by the organisers. It would be worthwhile for the medical team to find out if such a ruling has been made in this instance.