THE MEDICAL PROBLEMS OF AN OLYMPIC TEAM

J. Raymond Owen

Medical Officer Elect - British Olympic Team

In discussing the medical problems of an Olympic Team it is assumed that the Games are being held outside of this country. The Games were last held in England in 1948, and from my recollections of acting as an Assistant Medical Officer then the problems are not the same as when they are held abroad. For the Host Country there are no problems of travel or acclimatization and the main concern is with the administration of hospital and medical services to look after the visiting teams. Since it is unlikely that any of us will be interested in the Games by the time they are next held in this country, I only want to talk about the problems involved in taking a team abroad.

Obviously one cannot discuss every problem that may be involved, and I am only going to try to give a broad outline of how I, personally, try to set about it.

The organization falls into four phases:-

A. Planning
B. Pre-Olympic Preparation in this Country
C. The Journey
D. The Care of the Team Abroad

A. Planning

In most cases the two years between successive Commonwealth and Olympic Games are just about sufficient time to do this, though in the case of Mexico this started about 6 months before going to Tokyo, and has needed all of this time. The first thing to be considered is the place to which one is going, and whether this entails any specific problems of:-

1. Temperature
2. Humidity
3. Altitude
4. Diseases endemic in that particular country

1. Temperature

This is generally a problem of heat, though in the Winter Games in Sapporo it may well involve problems of extreme cold, and that is a question for a future date. Basically the higher the temperature the greater the change from this country and the greater the adaptation required, but in addition to consideration of acclimatization, there are the problems of sunburn, the amount of training desirable and the times when this should be done, difficulties of sleeping at night, food and clothing.

2. Humidity

This has, of course, to be considered in conjunction with the
temperature, but again, basically, the higher the humidity the greater the difficulty in heat loss, and the greater the risk of dehydration. This means consideration of fluid intake and salt, and in some cases sweat rash, which can be troublesome.

3. **Altitude**

This has been already discussed in detail, but obviously the questions to be considered are the actual height and the degree of oxygen deficiency, the time required for acclimatization, the type of preparation needed beforehand in this country, the rate at which training should be graduated on arrival, and the way in which actual competition is best tackled.

4. **Endemic Diseases**

The most usual one met with is, of course, gastro-enteritis. There was a good deal of this in Rome 1960, and one has seen it very frequently at European Championships, where there is no official village, the accommodation is often overcrowed and the sanitary arrangements inadequate. In places such as Mexico City, however, it is endemic, and this involves consideration of prophylaxis, including food, water and hygiene and the treatment of any cases that should arise.

Curiously enough we arrived in Jamaica in the middle of an epidemic of tonsillitis in Kingston, and this caused us quite a lot of trouble. It is always worth making enquiries of the local doctors, as soon as one arrives, as to whether there is any particular infection prevalent at the time.

Having considered all those factors involved in the place where the Games are to be held, and having found solutions to at least some of them, one has next to consider what medical supplies to take out there. Personally, I have always tried to take out with me an adequate supply of everything that seems even remotely likely to be required. However civilized the place to which one is going it is not always easy to obtain what one wants, and the cost is invariably much higher than at home, especially since the Drug Firms are always very generous in giving me everything I ask for. Although the Host Country always goes to considerable trouble to organize medical arrangements for the care of the teams, I much prefer to be self-supporting. One's own team prefer to be seen by their own doctor and, in addition to the language difficulties, the length of time and documentation required to treat even the simplest ailment can easily deter a competitor from seeking advice at all. I have vivid recollections of the Medical Centre in Jamaica, which involved a walk of half a mile from our living quarters, a wait of at least three quarters of an hour, and the filling in of a form requiring particulars of family history and personal habits that seemed wildly irrelevant to someone with a sore throat or an insect bite.
The drugs required fall into two main groups:

1. **General basic drugs** for the treatment of conditions which occur normally at any Games, irrespective of the place itself.

2. **Specific drugs** that may be required to deal with conditions related to that particular place.

I will not go into these in detail as the basic drugs are really those in normal use in general practice in this country, but the specific ones for Mexico will include:

- Streptotriad and Mist. Kaolin Morph. and Neomycin as a secondary defence.
- Lip Salve for dry lips and Saline drops for dry noses.
- Barrier cream (Uvistat) for those exposed to sun, and other creams for the treatment of any that do get sunburned.
- Salt solution for the use of the Yachtsmen at Acapulco and the longer distance athletes.

This involves taking a considerable amount of medical supplies, and in Mexico this will be more than usual owing to the length of time involved, but I am sure it is well worth doing.

**B. Pre-Olympic Preparation in this Country**

This is always a difficult question because as regards actual heat and humidity there is comparatively little that can be done to prepare for this, other than going out to the actual place itself. I think it is always sensible to try to get the team used to eating a similar type of diet to that they will be having out there, to try to avoid sudden changes of food, and always to warn them against over-eating in the village. They should also try to get used to doing their training sessions at similar times of day to what will be necessary abroad, in so far as this is possible.

I think preparation for Mexico may be able to be helped in the very long distance events by training at slower rates in extra clothing (as Pugh has suggested), and in events lasting from 1-8 minutes by adopting P. Travers' suggestion of high quality interval training with reduced intervals to improve cardio-vascular adaptability to the oxygen deficiency.

**C. The Journey**

We can assume that travel will be by air - the days of land travel, except for very short distances, are a thing of the past. The effects of air travel are, of course dependent on the distance involved, but the effects on the individual, in terms of exhaustion, are out of all proportion to the length of time spent in the air. Whether this is due to the fact that the aircraft is not pressurised to the actual height, or to the cramped condition, general boredom, or the fact that few people are ever really relaxed on a plane flight, never seems to have been satisfactorily established. I think, however, there are a number of things that can be done to lessen the effects:
(a) Moving around the aircraft from time to time.
(b) Getting out at each re-fuelling stop.
(c) Wearing loose, comfortable clothing and footwear.
(d) Not over-eating.

In addition to this one has to remember that there is a time change on arrival, which requires time to adjust for sleeping, bowels and meals, and that the competitors have been quite suddenly precipitated into a different climate from that at home. The greatest damage of the journey, leaving out all questions of altitude, is that competitors may stand hard training too soon after arrival, and with competition apparently imminent this can be difficult to prevent. The trouble is that starting work too soon after arrival does not usually produce any immediate ill-effect, but this becomes apparent during the second week, when competition is even nearer, and when it is often too late for a "lay-off" to do any good. It is difficult to specify how long a rest is required after arrival, and this involves consideration of the temperature, humidity, altitude and length of the journey. In the case of Mexico I think the team require to do no training for 3 days after arrival, and then to graduate it up to normal by the 8th day, but to avoid prolonged exertion and maximum effort until after the 12th day. There will, of course, be some who acclimatize slower, and in these cases the time required will be longer, but the important thing to appreciate is that acclimatization is a physical process that is dependent on each individual's ability to adapt, and the most fatal thing is to try and hurry it.

D. The Care of the Team Abroad

The first thing, before leaving England, is to suggest how soon training should start after arrival, and once they are there to try to see that they take notice of it. In Mexico City special care will have to be taken to spot those that are acclimatizing slower than the others, and to persuade them to graduate their training more slowly. Again, in Mexico, there may be more than the usual difficulty in sleeping during the first fortnight, and this may require sedation in some cases, but the more one can do with reassurance the better, because once sedatives have been started they can be difficult to stop.

The actual medical problems that have to be dealt with at an Olympic Games are usually simple and do not require any very advanced medical knowledge. The method of dealing with the complaints, however, is much less simple. The large majority of complaints are only trivial, and would probably get better without any treatment at all, but the worst thing to do is to make the individual feel that you regard them as trivial, and it is quite fatal to dismiss them as imaginary. Of course, we all know that many of the complaints are, in fact, imaginary, and are created in the mind of the competitor by fear that he may develop something which will prevent him from taking part, and the nearer it gets to competition the more common this type of complaint becomes. Any complaint must be listened to seriously, and the competitor allowed to talk and explain his symptoms.
partly, of course, to be sure that the symptoms are not suggestive of anything important, but much more commonly to make him feel that he is being taken seriously and real consideration is being given to his story, and to give him, and the other members of the team, confidence that they can come to the Medical Officer with any problem, of whatever nature, without being laughed at or told not to be silly. Personally, I have always felt that the more people come to see me, and the more trivial their complaints, the more success I am having, because it means one has gained their confidence.

The next thing that I think is important is to get round the different venues and see them actually training. By doing this one not only learns a little about each individual sport, which enables one to talk at least slightly technically when they come to see you, but it also gives them the feeling that you are interested in what they personally are doing and that you are not just a doctor sitting in an office in the village. In this respect, too, one cannot over-estimate the importance of getting to know the team managers and coaches, and discussing their problems with them - many of the problems may be concerned with things such as transport or training facilities, and have no apparent connection with medical matters, but it is surprising how helpful it can be to know the difficulties and frustrations of the competitors when it comes to dealing with their complaints. And again, the more one can gain the confidence of the officials the more likely they are to ask your advice about individual competitors, and one can often help to resolve problems that are producing physical effects, but are psychological in origin. The more one knows about an individual and about those in charge of him, the easier it is to treat him, whatever his complaint. I do not mean by this that one should be continually chasing round after competitors, or team managers, and trying to talk to them on every conceivable occasion, or joining them at meals when they probably want to be by themselves that is the surest way of never getting their confidence. But when, after a bit, some of them stop and chat outside or very occasionally join you at meals, then one is beginning to get accepted.

As regards actual treatment, this is usually simple and self-evident, but the more one can sum up the person one is dealing with the easier it is to make sure that the treatment is the right one for that particular individual. In a few cases simple reassurance may be all that is required, but in the large majority of cases, however trivial the complaint, reassurance must be backed up by some form of practical treatment, even if this is only an Aspirin or a digestive tablet. To the competitor his complaint is all-important, and one must treat it as such. Reassurance with treatment will usually ease him; reassurance without treatment is merely to cause frustration, and to tell him his complaint is imaginary is neither to reassure nor to treat, and if he gets neither of these it would have been better if one had never seen him because one has only made him worse.
In a very few cases a competitor may suffer from a complaint that
does prevent him from competing, and in these cases one has the
unpleasant task of deciding whether or not he is fit to take part.
The only criteria I can lay down is that he should not be allowed
to compete if his condition is such the the effects of his
competition are likely to result in physical harm, either during
that race, or in the future. The one thing, above all others
that should exclude a man is an infection producing a temperature
and especially if the temperature is of unknown origin. Severe
exertion during an infective illness (such as tonsillitis) may
leave cardiac effects, but a temperature of unknown origin may
well be the start of polio.

Conditions such as strained muscles may be able to be patched up
sufficiently to allow a person to compete, even if not as well as
usual, and other non-pyrexial complaints may result in nothing
more than a lowered performance. In these cases the decision
does not rest with the Medical Officer, but with the team manager.

Many of the complaints met with in an Olympic Team have their
origin in home-sickness, boredom with village life, and morale in
general, and although these should be the responsibility of the
team manager to deal with they quite frequently reach the Medical
Officer in physical form, and it is then his job to advise how
to deal with them. This is really staleness, and usually presents
as lassitude, tiredness out of proportion to the exercise taken
insomnia, irritability, leading to a falling off of performance,
and the creation of a vicious circle. If this is only slight a
change of routine and reassurance is all that is required, but
if it is more serious then it may be necessary to stop all
exercise and get the individual away for a complete change of
environment, company and food, even if this means breaking his
training. Unfortunately, by the time staleness of this degree
is seen competition is imminent and the time is too short for even
drastic measures to have much chance of success. The real treat-
ment of staleness is to spot it in the very early stages, when
it is still easily curable, and this can only be done by the
Medical Officer and the team manager working as closely together
as possible, and having mutual confidence. And above all to work
closely and conscientiously with the Chef de Mission, who can
so often help in so many different ways.

Lastly one cannot over-stress the fact that many of the complaints
from which Olympic competitors suffer are completely avoidable,
and that more races are lost off the track than on it. Sunburn
from sun-bathing; gastro-enteritis from unsuitable food, ice-cream
or unpeeled fruit; accidents from fooling about; stubbed toes from
running about in toe-less sandals - all these can, and do, occur
quite outside of ordinary training sessions, and any of them can
easily put a man out of the competition. One may say that the
prevention of these is hardly the job of the Medical Officer, but
what, in fact, is the job of an Olympic Doctor? So far as I see
it the job covers everything that may occur at the Games because
anything that happens may have medical repercussions in one way
or another, and anything one can do, whether by treatment, advice,
discussion, or simply observation, to make the wheels run smoother
is part of the job.