CHAPTER TEN

AIS MEDICAL STAFF AND SERVICES

INTRODUCTION

10.1 Health and sport are intimately related. On one level the community's participation in sport is consistent with improving the health of a nation. On another level, the finest sporting performances can only be attained when they are accompanied by a high level of health. Athletes, more than others, receive instant feedback of poor health when their sporting performances deteriorate.

ROLE OF AIS MEDICAL STAFF

10.2 The Australian Institute of Sport provides medical staff and facilities to ensure that athletes' health is maintained at a level to maximise their performances. It is accepted that heavily training athletes striving for greater performances suffer injuries and contract illnesses as a result of their training and competing. Dr Ken Donald noted that:

> Pain is an occupational hazard in a high performance sportsperson's daily life. It is the ability to withstand pain and to continue to perform that sorts out the winners and the losers.[1]

10.3 The medical staff provide the expertise to speed athletes recovery from injury or illness with minimum disruption to their training schedules. In essence, the medical staff of the Australian Institute of Sport are required to balance the health of the athlete against the striving for high level performance.

In some cases the health concerns are so great that athletes are advised to either discontinue a sport or reduce their training for a substantial period of time. For example, Mr Dallas Byrnes, an AIS weight-lifter, was advised to discontinue weightlifting because of a congenital back malformation.[2] Another AIS weight-lifter, Mr Gary Parisi, was advised to discontinue training to have a knee operation.[3] In most cases, however, a compromise can be reached as Dr Ken Maguire explained:

> In many sports of the Australian Institute of Sport there is a wide variety of alternative training programs that can be undertaken to maintain fitness while a particular injured area improves. That is a fairly typical example in weight-lifting, for example, where, if a person has a knee or ankle problem a program can be devised, which is usually devised between both the doctor and coach, to undertake what we call an upper body program. They simply work their upper body, but do not go through the formal manoeuvres of the weight-lifting techniques. In most cases an athlete does not have to stop complete training and the fine line between stopping an athlete from training and doing a modified program is something that the doctor and coach work very, very closely to define.[4]

RELATIONSHIP BETWEEN DOCTORS AND COACHES

Introduction

10.4 The Committee received a number of allegations that the coaches at the AIS were able to over-rule the doctors and that, as a result, athletes were forced to undergo training when the medical indications were that they should have been resting. Mr Nigel Martin for example, claimed that 'Coaches perceive doctors as providing an easy way out or an excuse to get out of training'.[5] He discussed what he saw as the very high injury rates resulting from training at the AIS[6] and said that Mr Lyn Jones, for example, 'has a history of overriding medical advice'.[7] He told the Committee he believed that:

> the very fact that doctors still work at the Institute and put up with ... outrageous injury rates to my mind must raise questions about their professionalism and their attitude in general to their work and sports.[8]

Mr Ron Harvey suggested that the high injury rates were simply because, 'with a hospital at hand, athletes invariably go there'.[9]

Use of Cortico-Steroids

10.5 In contrast to the muscle-building anabolic steroids which are banned, the anti-inflammatory and pain killing cortico-steroids can be used for cetain defined purposes. The IOC Medical Commission has ruled that:

> The use of cortico-steroids is banned except for topical use (aural, opthalmological and dermatological), inhalation therapy (asthma, allergic rhinitis) and local or intra-articular injections. Any team doctor wishing to administer cortico steroids intra articularly or locally to a competitor must give written notification to the IOC Medical Commission.[10]

It is not clear from this ruling if doctors are required to notify the IOC Medical Commission of the legitimate use of cortico steroids at all times, even during training, or only at the time of competition.

10.6 Two former Australian Institute of Sport weight-lifters alleged that the doctors at the Institute provided cortico-steroids to athletes at the coaches' request. Mr Paul Clark said that the doctors 'just took the coach's word and administered drugs'.[11] He also noted that the doctor did not inquire of his training regime, 'he usually left that to the coach's discretion'.[12] Mr Hambesis similarly suggested that the doctors

'never used to question the coaches'.[13] He described how Mr Lyn Jones suggested that he should have a cortisone injection to assist him to train and compete whilst he was suffering from a knee injury. After 'approximately three' such injections. Mr Hambesis:

> told Mr Jones that he did not want to have any more of the drug but would prefer to train with lighter weights to give the knee a chance to improve. Mr Jones told [Hambesis] to have the cortisone injections or leave the Institute.[14]

10.7 In the case of other substances the situation may have been even more relaxed. Mr Julian Jones explained to the Committee that if a weightlifter on a build-up schedule had five ATP injections during the last week:

> you just send him over for five in a row to the sports medicine department to get them.[15]

10.8 Dr Fricker, the Co-ordinator of Medical Services at the Australian Institute of Sport, strongly denied this type of relationship existed:

> No medical practitioner in his right mind would conduct a practice like that where a patient walks in, sits down on the bed, holds up a note saying 'Give me cortisone', and you give it to him without saying a word and he walks out.[16]

He explained:

> We made the decision with the athlete on the nature of the problem and the treatment. If they needed a cortisone shot it was discussed and then administered, and the coach was informed.[17]

Co-operation and Priority

10.9 Dr Fricker said that the doctors and coaches co-operated in the treatment of injured athletes:

> If an athlete is injured, we would discuss that injury with any coach of any athlete ... or at least put something in writing to communicate the diagnosis, recommended management treatment and so forth. Again, in the real world, that may not have happened 100 per cent of the time, but certainly with significant injuries there would definitely be a consultation and we did work closely with the lifting coaches in particular.[18]

10.10 This view of the doctor-coach relationship was supported by Mr Lyn Jones, the head coach of weight-lifting.[19] He even went further to say:

> You cannot believe that it is possible for a coach to override a duly appointed doctor of the AIS. That is what the doctors are there for: we work together; we are not working against each other. We want to get the best result for the athletes there.[20]

Mr Jones stated very strongly that he had never asked an athlete to train while injured, unless he had received clearance from the doctor.[21]

10.11 However, Dr Maguire, a consulting physician to the AIS, expressed a different view to that of Mr Jones:

> The emphasis in elite sports participation is for a person not to stop training ... that fine line between stopping an athlete from training and doing a modified program is something that the doctor and coach work ... to define ... If there is an argument - there very rarely is an argument - the person who normally wins out is the coach for many good reasons, because obviously the coach has the day-to-day assessment of the athlete and we

> may only see that person on one occasion to give an opinion. ... But, in almost all circumstances, the coach has the final say because he and the athlete decide on the appropriate course of treatment.[22]

10.12 Mr Don Talbot, the first director of the Australian Institute of Sport, confirmed Dr Maguire's view of the relationship:

> The coach was the boss. This was actually a decision of mine. The way that I had described this to people who came in applying for positions - particularly the medical people who were coming in, for whom it would probably be something that they had not experienced before - was that they were really resource people to the coaches. They were to understand that that was their role and that they had no right to question a decision of a coach or to interfere in a training decision that he might make. Outside of that, of course, if there was a complaint or an inquiry made to them on other grounds, then they could do what they liked with it. But if it meant training and working out or competing, then the coach was to make the final decision. In fact, we selected coaches on the basis of their understanding of what that could mean to an athlete, and on the understanding that they would always keep the well-being of the athlete uppermost in their mind.[23]

10.13 The evidence supports the view that, at least in the past, the coach had the controlling role in the training and health of AIS athletes, with the doctor providing information and advice in a consulting role. Logically, this has placed greater emphasis on the performance of athletes than on their health. Potentially this could lead to a greater than necessary level of sports injuries and attitudes which would support the use of performance-enhancing drugs.

10.14 At the AIS the coach has the controlling role in the training and health of the athlete, with the doctor providing information and advice in a consulting role. Logically, this

places greater emphasis on the performance of athletes than on their health. Potentially this could lead to a greater than necessary level of sports injuries and a situation where performance-enhancing drug use is condoned.

Pain-Killing Injections

10.15 One situation in which a conflict between doctors and coaches can occur is in the use of pain-killing injections to allow continued competition. This is a potentially dangerous practice which can result in further injury under the strain of competition without the controlling effect of pain. Mr Harry Wardle, assistant coach in weight-lifting, said that doctors did provide pain killing injections at weight-lifting competitions, but that the Institute doctors were not involved.[24] Mr Wardle is reported by the AIS solicitors as saying that:

> If a cortisone injection had been administered I would not let the athlete compete for a day or so.[25]

According to Dr Maguire, athletes were not allowed to compete between three and seven days after a cortico-steroid injection.[26]

10.16 Contrary to this evidence, an example of pain-killing injections being provided during a competition was described by Mr Lyn Jones in the Australian Institute of Sport Bulletin No. 27 of 14 October 1981:

> Chris Ford equalled his best snatch 130K and tore ligaments in his elbow with a very close 132.5. He had to have two pain-killing injections in his elbow to go on with jerks and did well to equal his best on 160K. He jerked 165K on his second, only to have it turned down by the referees. The Jury did not agree with them - neither did we - and they gave him a further attempt. However, although

> Chris gave it everything and walked all over the stage trying to hold it up, his elbow would not allow him to control the weight and he failed.

The idea of someone holding 165 kilograms above their head with an injured elbow is alarming to say the least, and can hardly be in the best interest of the athlete.

10.17 Dr Maguire commented on the use of pain-killing injections during competition as follows:

> if you were truly honest it is almost accepted practice by many elite sporting teams to have that sort of thing done. It is a matter of the patient knowing the risks, the doctor being prepared to do it, and the coach being prepared to let the athlete compete. It is not illegal. It is not illegal in the sense that it is medically illegal but there are medical contrary indications.[27]

Dr Maguire indicated that this approach was not acceptable to him and said that he did 'not see it as a proper way to manage people'.[28]

10.18 To discourage drug use it is necessary to encourage an environment in which health is placed above performance. For this reason, and in order to prevent further injury, the use of pain-killing injections in order to compete should not be allowed.

Education

10.19 Doctors and coaches also co-operated on a more personal level. For example, Dr Fricker explained the effects of drugs to the coaches. He explained the use of probenecid as a blocking agent to Mr Jones[29] and gave information to Mr Kemp on the drugs

Mr Kemp had brought back from Italy.[30] Dr Fricker also advised on the relevance of ATP to performance as a result of Mr Kemp's inquiries.[31]

MEDICAL ADMINISTRATION

Introduction

10.20 The administrative environment of the Australian Institute of Sport medical services and facilities is different from that of a usual doctors surgery. For example, there are only about 300 athletes requiring attention. The athletes attend the medical services frequently, often with recurring injuries. The medical staff have a much greater influence than with normal patients over the residential athlete's diet, living conditions, social environment and training.

Unusual Practices

10.21 In this environment, a number of practices have been adopted which are not in accord with the usual practice of a doctor's surgery:

- Physiotherapists were given permission by Dr Maguire to issue non-steroid, anti-inflammatory medications when the doctor was absent. Dr Maguire commented that:

> it was a somewhat blanket approval in the instance where there is an absence of a doctor, for example, on weekends or after hours; if in the instance of an acute sporting injury an athlete required a non-steroid anti-inflammatory medication, the athlete was issued that by either of those two people and subsequently we were notified that the athlete had had an injury and the medication prescribed.[32]

. Sister Beasley was given permission by Dr Maguire to provide supplies of medications to athletes for chronic injuries. Dr Maguire described the process:

> There were other instances where an athlete who had been taking a particular medication for a chronic injury was able to attend if his supplies of a certain medication had expired and he needed a further prescription or, should I say, a further supply. So in ordinary medical practice where we write repeat prescription system, but the medication was given usually through the AIS pharmacy and usually again noted in the patient's notes.[33]

. Sister Beasley provided injections of vitamin B12 if an athlete requested them, without the doctor's approval if he was absent.[34]

. Sister Beasley would attempt to record all injections on the athletes' medical records but may not have recorded all vitamin B12 or ATP injections.[35] This was confirmed by Mr Julian Jones, a weight-lifter.[36] Dr Fricker would normally record all injections administered within the surgery.[37]

. Throughout his time at the AIS Dr Fricker was aware that some coaches at the Institute were injecting athletes with Vitamin B12. He had watched Mr Lyn Jones injecting an athlete to check that he was using the correct procedure.[38] This was confirmed by Mr Jones.[39] Dr Fricker defended this practice on the grounds that the community accepts that injections can be made by non-medical people in the case of diabetics or by parents with allergic children.[40]

. Only three coaches at the Institute, Mr Lyn Jones, Mr Harry Wardle and Mr Merv Kemp, said that they had injected athletes while away from the Institute.[41] Dr Fricker said he had provided Vitamin B12 injections and syringes to coaches, but believed it was unlikely that he would have provided ATP

injectables.[42] Sister Beasley also provided syringes and Vitamin B12 to Mr Harry Wardle.[43]

- After 1982, food supplements and vitamin supplies were ordered as medical supplies.[44] However, Sister Beasley did no receive these supplies or control their distribution.[45] In fact, the audit report of Price Waterhouse noted that even after 1982, coaches could 'buy vitamins and food supplements without medical approval'.[46]

10.22 Dr Fricker indicated that the practice of allowing coaches to inject vitamin B12 and the provision of syringes and medications to coaches had now ceased.[47] This was a matter of policy decided by the Institute administration as a result of the Four Corners program in November 1987.[48]

Security of Drugs

10.23 In the early days of establishing the medical services area, concerns were raised about the security of medications held by the Institute. Medications were stored in unlocked cupboards and Sister Beasley told the AIS solicitors:

> I was concerned for a time in 1982/83 that there was a possible regular shortage of drugs from the cupboard, but this related to analgesics and anti-inflammatory drugs only. It is possible that there had been a break in but there was no evidence of a physical break-in. There were rumours that someone in the weightlifting squad had broken into the cupboard.[49]

10.24 The pharmacist, Mr Moore, who had stocked the cupboards when the AIS pharmacy was established in 1983, had expressed concern about the number of people who had access to the cupboard.[50] Sister Beasley later clarified this concern by stating that it was directed at easy access by 'physiotherapists and any of the medical staff'.[51]

10.25 With regard to current practice, Sister Beasley told the AIS solicitors:

> In May, 1986 we moved to the new Sports Medicine Centre. The method of storing drugs there was in locked cupboards in a locked alcove area. The alcove area is not left unlocked at night when I am not in attendance, but the cupboards are left unlocked during the day.[52]

Distribution of Vitamins and Food Supplements

10.26 The Sport Science Department of the AIS, which is distinct from the Medical Services Department, also distributed medications such as vitamins, minerals, inosine and a wide variety of food supplements to AIS athletes. Dr Maguire described how:

> Sports science people give out a whole range of things ... there can be up to nine different things given. These kids are taking up to 20 or 30 capsules a day that are not being recommended by a medical practitioner.[53]

10.27 Dr Maguire expressed concern at this practice because:

> Such medications are not given under medical supervision. The AIS medical staff have had numerous problems with such drug distributions. This principally relates to the interaction between Sports Science medications and those given by the medical staff which can result in the non-effectiveness of prescription medication such as antibiotics.[54]

He described the case of a rower whose recurrent chest infections were not responding to the prescribed antibiotics because of the antibiotic's interaction with high potency iron tablets being given by the sports science area.[55]

10.28 Dr Fricker also had knowledge of this case and commented:

> That was a patient of another doctor at the Institute. When I was made aware of that we contacted the particular person in the particular unit in the sports science area who had been supplementing the athlete's diet in training with various compounds - vitamins and minerals, including iron and so on - and the issue was basically discussed then to say that we must practise medicine and we must have some control over who is taking what. All the practice, if you like, from that end was to be held over until we could review it and any athlete who was given anything should be put through us first. The system has been tightened up in several ways. One is that in any projects on, say, applied nutrition and so on where supplementation is being investigated, those athletes are made known to us and the dosages of various things and so forth are kept on record for our information. if there are any suspicious medical circumstances that occur in that end of sports science they have to be presented to us pretty acutely and we take a much more supervisory role, as much as is possible, in that sort of experimentation and so forth. But certainly that problem occurred once.[56]

10.29 Dr Maguire told the Committee that:

> The AIS administration has not intervened to stop the distribution of such medications despite the concern of the AIS medical staff of the adverse aspects of non-medical supervision of such chemicals.[57]

If this issue of uncontrolled, interacting medications was raised with the AIS administration at the time of the above case, the administration would have been aware of the problem for over a year.

10.30 The AIS informed the Committee that, since 30 March 1989, the purchase, distribution and advice relating to vitamins,

minerals and food supplements has been completely under the control of AIS medical staff. All purchases have to be approved by an AIS medical practitioner, purchased by the AIS nurse and registered by the nurse on receipt.[58]

10.31 In this connection it is interesting to note that the amino acids and inosine tablets included in the weightlifting schedules discussed in Chapter Six, were purchased out of the weightlifting budget.[59] Their distribution had nothing to do with either the Sports Science or the Sports Medicine areas. Moreover, the weightlifting area did not keep any records relating to the distribution and use of these substances.[60]

Discussion

10.32 The practices which allowed coaches to obtain syringes and injectable medications, and to be seen to have legitimate reasons to inject athletes, potentially provided opportunities to hide the injection of anabolic steroids. Similarly, the lack of control over the purchase and distribution of medications would also have made it possible for coaches to obtain performance-enhancing drugs through the medical budget, if they so desired.

10.33 A second issue is the use of public money to provide B12 and ATP injections, and vitamins, inosine and food supplements. Research conducted at the AIS itself indicates that they are of no use to an athlete on a normal diet. Dr Maguire, for example, described a one year study at the AIS:

> fully funded ... through the Meat and Livestock Board, which showed without any shadow of a doubt that vitamin preparations made no difference. Despite that, the scientist that undertook that experiment continues to give out massive doses of vitamins.[61]

However, while there may be no physiological advantage produced by these substances, the Committee recognises that their use may well give sportspeople a psychological advantage, particularly if they are made available through the sports medicine area. For this reason they may help keep athletes from turning to banned substances for performance assistance. An alternative view would be that the principle of using chemicals to enhance performance should not be encouraged.

MEDICAL RESEARCH

Purpose

10.34 The medical staff of the AIS recognised the pressures on elite athletes to improve performance at any cost. For this reason, the medical staff conducted research into natural methods of enhancing performance. As Dr Fricker stated:

> The support and encouragement I received was most notably a result of the universal desire to find alternatives to drug abuse in sport, which could then be presented to athletes who were being tempted down the wrong path as meaningful, practical and safe methods of achieving their ultimate performance.[62]

Dr Maguire saw the research as an integral part of the process of deterring athletes from taking drugs and drew attention to the fact that 'the Australian Institute of Sport is the only organisation which has written scientific literature to look at alternatives to anabolic steroids'.[63]

Application of Research

10.35 Dr Fricker indicated that there was little follow-up of the research in the practical, applied coaching situation. He stated:

> we did a series of studies in the applied sense on athletes, using measured doses of amino acids. We measured their blood responses of growth hormone and so on over a period of six weeks in two cases, three days in eight in another case, and so on. We varied the conditions and we said, 'This seems to do that, this seems to do that: and this seems to do that'. We presented all those results back to the coaches and the athletes formally, in a one-to-one situation and as a group, and we have also presented that to our sport science staff at a research meeting. That is that. Then the coaches are free obviously, or encouraged, to take the suggestions that we make and apply them to their athletes.[64]

These experiments have been discussed in Chapter Six, in relation to the use made of them by the weightlifting squad.

10.36 Despite the fact that the research results provided no evidence to suggest that these substances were effective, coaches and the Sports Science area continued to provide them to athletes.

KNOWLEDGE OF STEROID USE

Sister Beasley

10.37 Sister Beasley was suspicious of Mrs Gael Martin and believed that she may have been using anabolic steroids, but did not observe any symptoms of steroid use in any other athlete at the Institute.[65] She believed that athletes would not confide in her because of her professed attitude:

> I have made it clear to every athlete that I do not want to know about anything to do with anabolic steroids and with taking anabolic steroids. If they were taking them, that is their own business and it is not to do with me. They never mentioned it because they know I am totally against that.[66]

10.38 The Committee finds this statement from Sister Beasley extraordinary, because Sister Beasley was responsible for carrying out the random drug testing program. It would seem to the Committee that athletes using performance-enhancing drugs should be her business.

10.39 Sister Beasley was also responsible for counselling residential athletes in the use of oral contraceptives and menstrual control when requested.[67] Given this responsibility, he stated attitudes to steroid use and her availability to discuss steroid use with athletes appears inconsistent. This is particularly important when the effects of steroid use on oral contraceptives or mentstrual control is considered.

10.40 A better approach would involve all members of the medical staff providing information on drug abuse but strongly emphasising the health aspects of the problem.

Dr Fricker

Mrs Gael Martin

10.41 Dr Fricker stated that in 1986, Mrs Gael Martin revealed to him that she was taking anabolic steroids. At that time, he believed he was bound by medical ethics not to reveal the matter to the Institute's administration, although he took the opportunity to discuss the matter in principle with the then Director, Dr John Cheffers.[68]

Other Suspicions

10.42 Dr Fricker was suspicious that other athletes at the Institute were using anabolic steroids, 'but all athletes either denied this or avoided questions on the subject'.[69] He argued that:

> it is difficult to spot a steroid user, either physically in the male, or by the occurrence of common medical problems presented in the normal context of a medical practice. Masculinising effects in the female are harder to hide and suspicions are more easily aroused - there is no doubt about that. In summary, the only ways to detect illegal use of doping agents is to perform dope tests, at random, under IOC rules. This is what we have done and have instituted over recent years and we are still performing at the Australian Institute of Sport.[70]

10.43 It was also noted by Dr Fricker that, because of the contracts they sign, he would now report on athletes who told him that they were on steroids. Two or three years ago, there would have been some discretion in reporting a steroid user to the administration.[71]

10.44 Mr Ron Harvey brought the Committee's attention to an apparent discrepancy between the scholarship paper, which the athlete signs and according to which the athlete agrees to allow doctors to breach confidentiality in the case of doping, and the AIS doping policy, which protects the doctor-patient confidentiality even in doping cases. The AIS sought legal advice to clarify this issue and advised the Committee of a suggested new clause to the AIS doping policy which protects patient confidentiality except for matters related to fitness to train or participate, or a breach of the drug policy.[72]

10.45 There was an element of contradiction in Dr Fricker's evidence. Although he was suspicious of steroid use in some athletes, he made no attempt to confirm his suspicions. However, he agreed that he had the power to order additional discretionary tests for steroid use as part of the in-house testing program.[73] This power was never used.[74]

10.46 Dr Fricker pointed out that his suspicions about Mr Hambesis were prior to the beginning of the AIS testing program. He also indicated that there was no need for a discretionary drug test in Mrs Gael Martin's case, as he had certain knowledge of her use of anabolic steroids and had raised the issue with the Executive Director at the time, Dr Cheffers.[75]

10.47 Dr Fricker, in the course of normal treatment, had questioned the weightlifters about anabolic steroid use but they had all denied any use of banned substances.[76] He did not order a discretionary test of Ms Howland because 'I did not suspect that she was on steroids',[77] and because 'she was not an Institute scholarship holder at the time'.[78] Ms Howland was an associate scholarship holder in 1986 and 1987.[79]

10.48 There is some doubt about Dr Fricker's knowledge of Ms Howland's steroid use, as will be discussed in the next section. However, his comment suggested that he had a particular time in mind when asked about her steroid use This was probably related to the pathology test requested by Dr Maguire. To simply order a discretionary test of Ms Howland at that time would have put the issue beyond doubt, and possibly prevented her subsequent banning at an international athletic competition.

Dr Maguire

Introduction

10.49 Dr Maguire said that he had certain knowledge that Ms Sue Howland was using steroids. He stated that:

> She attended with her coach or, should I say, her coach - adviser at the time Kelvin Giles because they were concerned that she may have been taking an excessive amount of anabolic steroids.[80]

Dr Maguire told the Committee that he understood that:

> Her major concerns related to the dosage she was taking and whether that would cause any long-term adverse effects. I explained to her that if, for example, you undertook liver function tests that would not tell anything with regards to the liver problems because with patients taking anabolic steroids the liver may become slightly abnormal during the initial part of the treatment but thereafter it normalises so testing does not help you. The only way to know about long term damage is to look at the irreversible effects of anabolic steroids. In a female athlete that relates to the effect of testosterone on the clitoris, the chest hair, their voice and sterility.[81]

Testosterone - Epitestosterone Test

A. Introduction

10.50 At the time of this initial consultation, Dr Maguire ordered testosterone to epitestosterone ratio tests on three different occasions one week apart.[82] He said that he counselled Sue Howland on the dangers of anabolic steroids and understood that she was ceasing her current dosage of 40mg of Andriol per day.[83] Andriol is a commercial testosterone.

10.51 The reasons that Dr Maguire ordered the testosterone to epitestosterone ratio tests were not made clear. Dr Maguire stated that the test:

> has other connotations in endocrinology, where we are looking at the metabolite ratio because, of course, the testosterone is metabolised. You need to know more than just the testosterone.[84]

However, when the pathology laboratory advised that they were unable to do the ratio rest, he stated that:

> As far as I am concerned, all that I really need to know is the testosterone.[85]

And in a later hearing:

> I initially ordered a urine test and then subsequently the blood tests were taken. As you are aware, the laboratory people phoned and said that they were unable to do that particular test I had ordered, so I said that I would be quite happy just to know exactly what happened to the testosterone level.[86]

10.52 Dr Maguire also explained why three tests were ordered and not just one:

> The main reason for the three tests is the variability that one can get with hormone assays and also, with the biological variation up and down, we had to be absolutely sure that the medication was an excessive dosage - that was the key thing - and to say, 'You are kidding yourself if you think that you can take these things and get away with it. They are going to cause problems'. That is the reason for doing the tests.[87]

10.53 The testosterone tests, which started on 15 January 1986, showed that the testosterone level in nanomoles per litre varied from 0.7 in the first week to 4.9 in the second week and 2.1 in the third week. The advice on the test results from Macquarie Pathology Services show that the reference range for females is below 3.0 nanomoles per litre. Results above this level are indicative of the need for further investigation.[88]

TABLE 10.1[89]

Testosterone Assay Ms Sue Howland

Date	Testosterone n mol/L
29 January 1986	2.1
22 January 1986	4.9
15 January 1986	0.7

Reference range: Female <3.0 n mol/L

B. Interpretation of Results

10.54 Dr Maguire provided an ambiguous explanation of the test results. The pattern of results over the three weeks could be interpreted purely as natural variability, indicating however that an above-normal level of testosterone was recorded in one instance; or the results could be interpreted as a continuation of the use of anabolic steroids by the athlete.[90] Dr Maguire told the Committee that:

> The fact that the first test really showed that it was still within normal levels to me meant that she probably was not taking a super excessive amount. When the second test was elevated, that really made me think, 'Is she stopping the medication or not?' The last dosage was of course in the normal range. So she stopped. But those levels were not so high that I felt it was necessary to go on and do the more expensive tests such as assessing her pituitary function. I did not really think that her testosterone level was significant enough to warrant any further investigation at that stage.[91]

10.55 Similarly, Dr Maguire appeared confused over the underlying principles of his interpretation of the results. He stated that:

> My premise of doing the test was to assess what has happened to that particular end organ response and to say, if, on the second test, despite your alleging that you have reduced your medication, your testosterone is elevated, you have serious problems because you have induced over a long period of time of taking that particular medication, significant elevations of your body's own testosterone and that is going to cause significant problems with masculinisation, sterility, et cetera.[92]

10.56 This indicates that Dr Maguire expected an elevation of testosterone as a sign of serious problems. In effect, he argued

that the production of testosterone in the female ovaries or adrenal gland is stimulated by the introduction of testosterone by injection, and that this higher level of testosterone continues even after the testosterone injections are stopped. However, medical research indicates that because of negative feedback, a lowered testosterone level would be expected.

> When the concentration of testosterone in the blood is low, the hypothalamus releases leutenising hormone stimulating the pituitary gland to release gonadotrophin. This in turn stimulates the Leydig cells in the testes in the male [or the ovaries and adrenal gland in the female] to produce testosterone. When the level of testosterone is normal to high, the hypothalamus is not stimulated, thus the circuit is depressed and no additional testosterone is produced.[93]

10.57 It is important to note that Dr Maguire did not follow-up the test results and did not have any consultations with Ms Sue Howland about anabolic steroids apart from the initial Australian Institute of Sport consultation when the tests were ordered. Dr Maguire stated:

> She was told that she must stop and that was the end of the consultation. I had no further reviews with her after that in relation to this particular issue. So she was informed to quite categorically that she must stop.[94]

At a later hearing he again stated that:

> When I reviewed the results there was no indication for further tests and that was just left on the table. I did not discuss with her doing any further test for investigations or I did not even discuss with her the results of those particular tests. I have no recollection of her phoning me up and saying , 'Look, what did the tests show?'. The fact that the tests were really quite normal, except for that

> middle one, to me meant that there was no major concern about end organ problems.[95]

C. Ms Sue Howland's Explanation

10.58 The Committee was aware of the testosterone-epitestosterone test because Ms Howland, under summons, had been compelled to provide to the Committee papers in her possession relevant to the subject of the inquiry.

10.59 Ms Howland indicated through her evidence that her consultation with Dr Maguire was for an entirely different purpose than to check on the long term effects of anabolic steroids. She wanted to establish the time it would take for Andriol to clear her system and become undetectable in a drug test. Andriol is a form of testosterone and is used as a replacement for anabolic steroids in the weeks leading to a tested competition. She stated that:

> I'd bought the bottle of Andriol in September 1985 in Seoul with Kelvin [Giles] as he said it was really good for going close to testing. I said I wouldn't mind doing a little experiment to test it out some time and he said he'd speak to Ken [Maguire] about it. Regarding whether I was accompanied by Kelvin - I went to see Dr Maguire about an injury and I mentioned that Kelvin was going to have a chat to him. He told me that Kelvin had already spoken to him all about it and he sat down straight away and filled out the pathology request forms with blank dates on them for me.[96]

Ms Howland also told the Committee that:

> Dr Maguire told me he'd heard andriol is out of the system in 72 hours so he was quite interested to see if it was true, as having first hand knowledge is better than relying on rumours.[97]

10.60 Ms Howland informed the Committee that the results of the tests were consistent with her expectations:

> The results of the first of our three tests showed a level which was in the normal range for that of a female. That was exactly what it was supposed to show, the next test being done at the end of the 10 day period when the highest level was in the system. The third was a few days later to see how much had gone out of the system in that period of time.[98]

10.61 In effect, the information provided by the series of tests allowed Ms Howland to calculate that seven days after ceasing taking 40mg of Andriol for a period of ten days, her testosterone level was in the normal female range and presumably undetectable. The only possible improvement in this knowledge would be provided by the use of the testosterone to epitestosterone ratio test as originally requested, because this is the test used by doping laboratories. Ms Howland told the Committee that she was not aware of any other athletes having screening tests carried out at the AIS but that she knew:

> of another [AIS] scholarship holder who wanted to know the results of the tests when he'd heard that I'd had them done.[99]

10.62 Ms Howland also stated that:

> Dr Maguire has never spoken to me at any time about <u>any</u> type of effects. He has also definitely never told me to stop taking steroids.[100]

Ms Howland also commented that if Dr Maguire had carried out tests to check potential damage:

> I would have thought that the most important test would be a liver function test. I'm not a doctor but I can't imagine why he'd only do a testosterone epitest. test when checking for long term side effects of steroids,

particularly when I hadn't been on steroids for quite a long period of time.[101]

D. Mr Kelvin Giles' Response

10.63 Mr Kelvin Giles stated that he arranged for Ms Howland to meet with Dr Maguire but implied that he was not present at the consultation described by Dr Maguire. Dr Maguire indicated repeatedly that Mr Giles was present.[102] Mr Giles' motivation for arranging the meeting was his concern that Ms Howland was taking 'a new drug called Andriol that she obtained from Korea'. He reported that Dr Maguire 'reinforced the hazards of taking an unknown, foreign-purchased drug and offered to test her for any harmful effects'.[103]

10.64 It is difficult to characterise Andriol as a 'new' or 'unknown' drug as it is described in detail in the Practitioners Priority Guidelines of 1984 distributed by the Commonwealth Department of Health and Community Services. This publication is readily available to doctors. Andriol was approved for marketing in Australia in September 1983. MIMS annual, 1988, a directory of available medications, provides a detailed description of Andriol, indicating that it is between 77 per cent and 93 per cent excreted three to four days after administration.[104]

E. Purpose of Testosterone:Epitestosterone Test

10.65 Dr Ken Donald, a pathologist and the person in charge of the 1982 Commonwealth Games drug testing, when asked to comment on the use of the ratio test in relation to androgenic effects said:

I cannot really see the value of testosterone: epitestosterone ratio in that context.[105]

He said that he would conduct such a testing regime to discover how long before a competition athletes would be required to cease taking a drug to ensure they would be tested negative. He stated:

> I would simply get the things measured that were going to be measured to test me when I competed. That is, I would have a test done for the artificial compound itself, that is, the anabolic steroid, and I would have the testosterone - epitestosterone ratio done. ... I would get it done several times.[106]

F. Comments by Ms Raelene Boyle

10.66 Ms Raelene Boyle, a former Australian athlete and friend of Ms Howland, told the Committee that Ms Howland had told her the purpose of the test was to avoid detection during competition.[107]

G. Dr Fricker's Involvement

10.67 Sue Howland also said that Dr Peter Fricker was aware that Dr Maguire had ordered the testosterone to epitestosterone ratio test for her:

> Then Peter Fricker came and I saw him the following week and I said, 'We never got our results', and he was quite upset with Ken Maguire because Ken did epitestosterone-testosterone levels and Peter said, 'What you should have done was just go back and instead of doing the testosterone levels you go partly back into the body and ask for something else, and then no-one knows what you are actually looking for, but you get exactly the same results'.[108]

Dr Fricker's comments here are consistent with the remark recorded in the handwritten version of the statement made by Dr Maguire to the AIS solicitors that 'Path request made in re problems/symptoms complained of not for medication being taken'.[109]

10.68 Dr Fricker denied any knowledge of the test or of this meeting with Ms Howland.[110] He stated that his only involvement with the tests was in passing a telephone message to Dr Maguire to ring the pathology service.[111]

10.69 However, Dr Maguire indicated that Dr Fricker, as a result of the phone call from Macquarie pathology, 'would have known that that girl [Ms Howland] had admitted that she was taking an anabolic preparation'.[112] He stated:

> That would be the first time he knew definitely. There had been strong suspicions for many, many years that she had been taking preparations. There had been very strong suspicions about both her and Gael Martin, going back probably to 1981-82, but there was absolutely no proof whatsoever, nor had the athletes ever admitted that they were taking a preparation. Particularly from Sue's point of view, she is a fairly masculine looking lady and people had obviously questioned her superb performance and also the fact that she travelled regularly to Europe and had always thrown her best when she had returned from European competition. So there were obviously question marks about her for a long, long time. Again, there was no admission from her, she had never confronted anybody for advice about drugs, et cetera.[113]

H. Administration's Knowledge

10.70 Dr Maguire did not inform the Institute's administration of his certain knowledge that Ms Howland was taking Andriol. He argued that:

> The most important thing is the professional confidentiality. Our role is to work with the athlete; our role is not to be seen as a pimp, to tell administration about every single medical problem of the athlete ... I do not see my role as a doctor to be dashing off to administration to tell them about every

> medical problem of an athlete, even though it is something as significant as the anabolic steroid issue.[114]

10.71 Dr Maguire agreed with the Committee that he was aware at the time he ordered the test that Ms Howland had signed the scholarship holder's agreement which absolved him from medical confidence, but that this did not affect his actions.[115] It is also interesting to note that no record of the visit or test request was made on Ms Howland's medical records although a copy of the Macquarie Pathology result form was later placed in the file. Dr Maguire explained that no record was made because:

> of the trickiness of that particular issue to have an athlete admit that she is taking an anabolic preparation and that she is concerned about possible side effects.[116]

I. Payment for Test

10.72 It is clear from the Macquarie Pathology Services form that the testosterone to epitestosterone ratio test was paid for by Medicare. The Health Insurance Act states:

> Unless the Minister otherwise directs, a Medicare benefit is not payable in respect of a health screening service, that is to say, a professional service that is a medical examination or test that is not reasonably required for the management of the medical condition of the patient.[117]

10.73 The Department of Community Services and Health have advised, in respect of the monitoring of steroid activity, that:

> the pathology tests carried out to check enzyme levels are not reasonably required of the management of the medical condition of the patient and therefore fall into the category of health screening.[118]

10.74 This advice would seem to apply to the use of testosterone level tests to avoid detection in a drug testing program. On the other hand, Dr Maguire argues that it was quite proper to use Medicare to fund the test:

> I think it was proper in the sense that we were evaluating the endocrine problems of the medication a patient was taking. It is very important to know what is happening to that particular patient, particularly the endocrine function. That really is a form of evaluation of the patient's sickness or illness and whether the patient has any disability of the body as a result of the medication.[119]

Discussion

10.75 There are many inconsistencies in the evidence offered by Dr Maguire on this matter. He claimed that Ms Howland sought his assistance to examine any long term damage she may have suffered through the use of Andriol, a form of testosterone. As a result of this consultation he counselled her to cease taking Andriol and ordered a urine analysis for the testosterone to epitestosterone ratio. This test was not available and Dr Maguire settled for a blood test of testosterone levels on three different days, one week apart. The results were not provided to the patient, nor were there any subsequent consultations. She obtained them later herself.

10.76 The Committee concludes that the medical reasons advanced for ordering the testosterone to epitestosterone ratio by Dr Maguire are not convincing and are contradictory to evidence from other medical experts. Similarly, his discussion of the testosterone level results did not contribute to the Committee's understanding of his purpose in ordering the tests in the form that he did. The most telling evidence is that the results were apparently not used in any subsequent consultation.

10.77 Ms Howland's evidence, in contrast, is consistent and easily understood. In wishing to establish the clearance times for Andriol, she sought to have the same test as used in a drug test taken before, during and after a course on Andriol. She would have no reason to be concerned about the androgenic effects of Andriol (a testosterone) because she would use an anabolic steroid during training and only change to testosterone for a short period nearer to a drug-tested competition. She obtained the results subsequently from Macquarie Pathology without Dr Maguire's assistance and the results of the testosterone test are consistent with her explanation.

10.78 In considering Mr Kelvin Giles' evidence on this matter, the facts show that Andriol was not a 'new and unknown drug' at that time. Ms Howland's evidence, that Mr Giles advised her to purchase Andriol in Korea because of its fast clearance time, is consistent with the events that followed. It is inconceivable that an international track and field coach of Mr Giles' standing would be unaware of the actions of testosterone at that time in early 1986.

10.79 The Committee concludes that Dr Maguire arranged the testosterone tests for Ms Howland for the purpose of establishing her clearance time for Andriol and that this was done at public expense. Mr Giles is implicated with this action to mislead the Committee. Ms Howland's evidence is judged to be a consistent and true account of events.

Knowledge of Weightlifting 'Build-ups'

10.80 Mr Dallas Byrnes, a weight-lifter at the Institute said that he believed that the doctors were aware he was using anabolic steroids, particularly during a 'build-up' to a competition.[120] However, he did not discuss steroids with the doctors at any time.[121] Mr Byrnes indicated that the term

'build-up' was almost synonymous with being on a course of steroids for the weightlifters. He stated that:

> if you are on a build-up it means you are on a course.[122]

10.81 A weightlifter who gave evidence in camera indicated that he was at the AIS for about a month in early 1986.[123] During this time he was assessed for a full scholarship and checked by Dr Maguire.[124] A disc lesion was diagnosed. Dr Maguire explains:

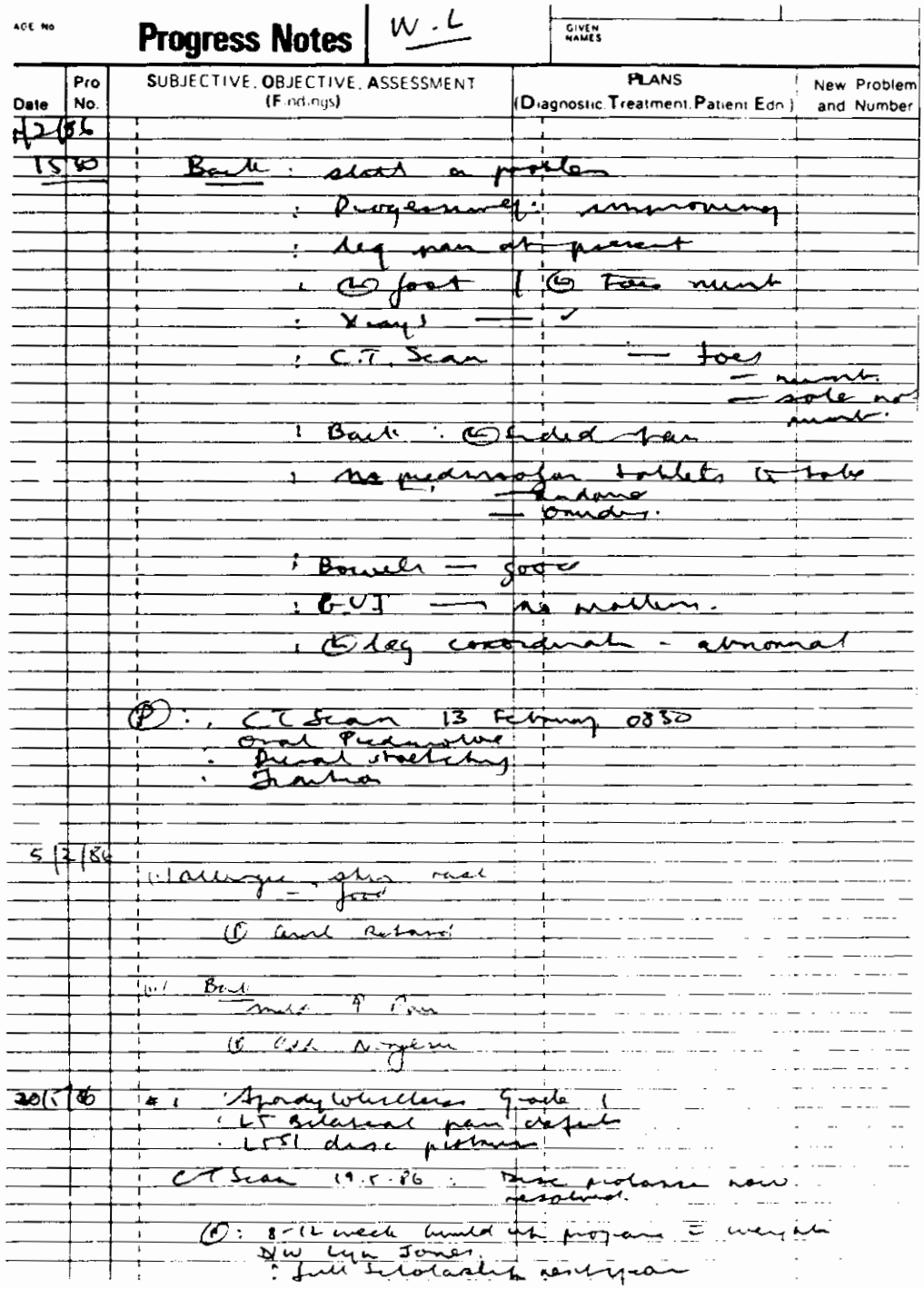
> The main reason for [him] was that he came down basically to be considered for a full scholarship because he came down, he trained pretty well, and when we discovered the disc problem we said, 'Look, ... you are really going to have to stop training. When you go back to Sydney the point is that you have to have another scan to show that it is resolved'. When it had resolved [he] and I spoke on the phone and I said, 'Everything is very good but you now have to build your training back up again to get fit', because he wanted then to lift a sufficient weight to be considered for a scholarship the following year. We had a period of between three and six months to increase his training load such that he could be considered for readmission to the Institute and subsequently he progressed well and was readmitted to the Institute.[125]

10.82 The weightlifter told the Committee that he was using anabolic steroids during this build-up period and that Lyn Jones had sold him the steroids for this purpose. An annotation by Dr Maguire on the weightlifter's medical records reads:

> Eight to twelve week build-up program equals weight; DW [discussed with] Lyn Jones; then full scholarship next year.[126]

Figure 10.1 on the following page shows the relevant medical record.

FIGURE 10.1



Weightlifter's medical record showing use of the term 'build-up'.

10.83 Dr Maguire denied that the term build-up involved a course of steroids:

> That is a fairly common statement that we have build-up programs for swimmers and everybody. When they are recovering we build them up gradually.[127]

Assessment of Weightlifters

10.84 In his statement to the AIS solicitors after the November 1987 Four Corners program, Dr Maguire indicated some knowledge of anabolic steroid use in the weight-lifting squad. The statement read:

> I normally assume that the weight-lifter is taking anabolic steroids, although this is a suspicion only as I have no evidence. Tests for anabolic steroids are taken by blood test. A weight-lifter would be very wary of a urine test. Clinically, there are no obvious medical signs to create a suspicion that an athlete is taking anabolic steroids, but regular presentation of stomach problems causes one to be careful.[128]

10.85 When questioned, Dr Maguire denied that this statement was a true record of his interview:

> I would retract that statement because that is untrue from my point of view.[129]

Dr Maguire said in later questioning that he assumed weight-lifters are not on steroids, a position completely opposed to the statement made to the solicitors.[130] He also said that:

> at no stage do we specifically order tests which are looking for anabolic steroids.[131]

Moreover, at no stage during his entire time at the Institute had he:

> seen a blood test on a weightlifter which has been suggestive of severe toxic effects of any known medication.[132]

He told the Committee that:

> in any of the power sports, one has in the back of one's mind the possibility, but under no circumstances did we consider any particular lifter taking steroids.[133]

10.86 The AIS solicitors who conducted the interview with Dr Maguire, later informed the Committee that they believed the original statement in the report was a true record of the interview. The handwritten note of the interview read:

> You normally assume a weight-lifter is taking anabolic steroids - merely suspicions without evidence - but always aware of the possibility.[134]

10.87 On being informed about this confirmation of the interview report Dr Maguire wrote to the Committee that:

> Mr Stanwix, the A.I.S. Solicitor, informed me after the hearing that his short hand notes abbreviated drugs as A/S and that when he transcribed his notes he felt that A/S stood for anabolic steroids. The correct statement is anti-inflammatory drugs. Mr Stanwix initially apologised for the error and said a change would be made. However, after a five minutes discussion with Dr Ross Smith, AIS Acting Director, he informed me no change would be made. The correct wording would be anti-inflammatory drugs.[135]

10.88 In a later hearing, Dr Maguire again argued that the AIS solicitor, Mr Stanwix, had made a mistake in his abbreviations and described a conversation after the initial hearing:

> He [Mr Stanwix] felt that it would be inappropriate to change it and I said, 'You

> must change it because it does not read correctly'. The fact that that person comes with stomach problems and is being treated for injuries, the first thing you think about is his use of anti-inflamatories, not anabolic steroids. Then there was the thing about testing for anabolic steroids using blood tests. You do not test for anabolic steroids using blood tests. So there were errors in just that paragraph and when you look at the other paragraphs the errors just continue. His abbreviation for anabolic steroids was ABS. He said to me, 'No, I think my abbreviation in that one was AS'. I said, 'Perhaps your AS should have been interpreted as anti-inflammatory rather than as anabolic steroids'.[136]

10.89 The actual handwritten notes, as shown in Figure 10.2, do not use abbreviations at all and clearly state 'anabolic steroids'. The second sentence, 'Path. request made in re problems/symptoms complained of not for medication being taken', seems to indicate that Dr Maguire was well aware of steroid use by weightlifters and is consistent with the comment allegedly made by Dr Fricker to Ms Howland that:

> instead of doing the testosterone levels you go partly back into the body and ask for something else, and then no-one knows what you are actually looking for, but you get exactly the same results.[137]

FIGURE 10.2

I normally assume that the weightlifter is taking anabolic steroids, although this is a suspicion only as I have no evidence. Tests for anabolic steroids are taken by blood test. A weightlifter would be very wary of a urine test. Clinically there are no obvious medical signs to create a suspicion that an athlete is taking anabolic steroids, but regular presentation of stomach problems causes one to be careful. In 1982 I did not divulge information to coaches but I have since changed this procedure. I have never prescribed anabolic steroids.

Summary of discussion in AIS Solicitors report.

You normally assume a w/lifter is taking anabolic steroids - merely suspicions without evidence - but always aware of this possibility.
Tests taken by blood ~~test~~. W/l told but v. wary of urine test. Path request made in re problems/symptoms complained of not for medication being taken.

Copy of handwritten notes of discussion.

You normally assume a w/lifter is taking anabolic steroids - merely suspicions without evidence - but always aware of this possibility.
Tests taken by blood test. W/l told but v. wary of urine test. Path request made in re problems/symptoms complained of not for medication being taken.

Typed transcription of handwritten notes.

10.90 Mr Stanwix described his version of events following the initial hearing involving Dr Maguire:

> When he rejected the content of the note in his evidence to the Committee, and during a break I commented to him by way of speculation, if you like, whether it was possible that the context of the paragraph in the statement would make sense if instead of the words 'anabolic steroid' the typed note had mistakenly reflected an abbreviation anti-inflammatory'. That was pure speculation by me at the time. I did not have the handwritten notes with me. I had no reason to suspect that there was an error. But he was so adamant that he had not referred to anabolic steroids in that way, and you have seen the handwritten note, Senator. There are some lines of notation. It is not as if it is a passing note. It is a discrete portion of discussion about anabolic steroids ... Dr Maguire rejected the interpretation that there could have been an error of the kind speculated about.[138]

10.91 The handwritten note, by its very nature, supports the view of events of Mr Stanwix and the AIS. It is quite clear that the note is not abbreviated and the discussion is about anabolic steroids. It is inconceivable that the AIS solicitors had interpreted Dr Maguire's comments in exactly the opposite way to that he had intended. On balance, the evidence indicates that Dr Maguire was aware of anabolic steroid use among the AIS weightlifting squad and subsequently sought to conceal evidence of this knowledge.

USE OF DEHYDRATION TO 'MAKE-WEIGHT'

10.92 Diuretics are a banned substance according to the IOC Medical Commission.[139] They are used both to reduce weight quickly and to reduce the concentration of banned drugs in urine by producing a more rapid excretion of urine.

10.93 Mr Nigel Martin told the Committee that Dr Fricker was involved in providing saline drips to AIS weightlifters to assist their recovery after rapid weight loss to make the correct limit. He stated that:

> The Committee should perhaps look at the use of diuretics, which are now banned but which are used extensively in weightlifting ... They should also look at the use of saline drips which are given to athletes after they made the weight division. I have witnessed this in athletes from the AIS, from both Hawthorn and Canberra, being administered glucose drips ... by Dr Fricker and Dr David Kennedy. You go into a room and there are all these people lying on beds with a thing in their arm.[140]

He did not accuse Dr Fricker of providing or encouraging the use of diuretics.

10.94 Dr Fricker informed the Committee that he had provided saline drips to assist recovery but that he did not believe the use of diuretics was involved. He stated that:

> no AIS athlete or coach was given diuretics by myself for the purpose of losing weight for competition.[141]

10.95 Dr Fricker said that he had administered intravenous fluids to athletes around the time of competition on two occasions. He pointed out that:

> These were AIS weightlifters and under the rules of competition time was allowed between the weigh-in and the competition itself. This time was specifically scheduled by the International Weightlifting Federation (IWF) to allow for athletes to 'rehydrate' and the use of intravenous fluids in this context was a practice which was widespread and accepted internationally. Such a practice was not proscribed or banned by the IOC.[142]

10.96 One occasion was at the Australian Games in 1985 when Mr Daniel Mudd and one other weightlifter became unwell and suffered cramps after losing several kilograms of weight through 'fasting, sauna room use, running distances in hot clothing and training hard without drinking'.[143] The second occasion, in 1985 1986 involved an international competition in Melbourne when Mr Cameron Menhenick became sick after 'similarly induced weight loss'.[144] Dr Fricker emphasised to the Committee that:

> In 1986 my thinking on the use of intravenous rehydration led me to the belief that this practice may lead athletes into a false sense of security where vigorous self- dehydration to the point of sickness by athletes would be reversed safely and quickly by a medical officer ... I decided that such a practice should cease and in 1986 coaches and athletes were informed of the decision.[145]

10.97 Although Dr Fricker has now ceased this practice, and this was corroborated by Dr Maguire,[146] the question remains whether this practice is continuing under the supervision of other medical practitioners. The Committee considers that this practice, whether it involves diuretics or other rapid weight loss methods, is not in the interests of the health of the athlete. It encourages athletes to attempt drastic weight loss in the knowledge that a doctor will assist them to recover and compete.

1. K Donald, The Doping Game, A Boolarong Publication, Brisbane, 1983, p. 82
2. Evidence p. 784
3. Evidence p. 788
4. Evidence p. 1408
5. Evidence p. 700
6. Evidence p. 678
7. Evidence p. 685
8. Evidence p. 700
9. Evidence pp. 2069-70
10. Evidence p. 107
11. Evidence p. 653
12. Evidence p. 638
13. Evidence p. 640
14. Evidence p. 634
15. Evidence p. 1059
16. Evidence p. 1506
17. Evidence p. 1507
18. Evidence p. 1495
19. Evidence pp. 789 and 810
20. Evidence p. 835
21. Evidnece p. 807
22. Evidence p. 1408
23. Evidence p. 1612
24. Evidence p. 1250
25. Mallesons Stephen Jacques Report on Enquiry Conducted for the Institute from 27 November to 7 December 1987
26. Evidence p. 1422
27. Evidence p. 1424
28. Evidence p. 1424
29. Evidence p. 898
30. Evidence p. 1132
31. Evidence p. 1161
32. Evidence p. 1404
33. Evidence p. 1404
34. Evidence p. 1372
35. Evidence p. 1374
36. Evidnece p. 1048
37. Evidence p. 1487
38. Evidence p. 1512
39. Evidence p. 795
40. Evidence p. 1472
41. Evidence p. 845, Letter Mr Wardle to Secretary, 1 February 1989, Letter Mr Kemp to Secretary, 24 January 1989
42. Evidence p. 1492
43. Evidence p. 1377
44. Evidence p. 1522
45. Evidence p. 1392
46. Evidence p. 1582
47. Evidence p. 1473
48. Evidence p. 1489
49. Mallesons Stephen Jacques Report, op. cit Section 2.3
50. Mallesons Stephen Jacques Report, op. cit Section 2.3
51. Evidence p. 1376
52. Mallesons Stephen Jacques Report, op. cit Section 2.3
53. In Camera Evidence p. 669
54. In Camera Evidence p. 570
55. In Camera Evidence p. 668

56. Evidence p. 2052
57. In Camera Evidence p. 570
58. Evidence p. 21577
59. Evidence p. 926
60. Evidence p. 934
61. In Camera Evidence p. 669
62. Evidence p. 1472
63. Evidence p. 1402
64. Evidence p. 1489
65. Evidence p. 1379
66. Evidence p. 1308
67. Evidence p. 1381
68. Evidence p. 1473
69. Evidence p. 1474
70. Evidence p. 1476
71. Evidence p. 1512
72. Evidence p. 2066
73. Evidence p. 1480
74. Evidence p. 2023
75. Evidence p. 2025
76. Evidence p. 2026
77. Evidence p. 2026
78. Evidence p. 2027
79. Evidence p. 526
80. Evidence p. 1425
81. Evidence p. 1425
82. Evidence pp. 1527-8
83. Evidence p. 1426
84. Evidence p. 1429
85. Evidence p. 1429
86. In Camera Evidence p. 607
87. Evidence p. 1455
88. Evidence p. 1427
89. Evidence p. 1427
90. Evidence p. 1436
91. In Camera Evidence p. 622
92. Evidence p. 1457
93. Submission No. 22 p. 14
94. Evidence p. 1438
95. In Camera Evidence p. 624
96. In Camera Evidence pp. 616-7
97. In Camera Evidence p. 614
98. In Camera Evidnece pp. 615-6
99. In Camera Evidence p. 614
100. In Camera Evidence p. 615
101. In Camera Evidence p. 615
102. In Camera Evidence pp. 621 and 624
103. In Camera Evidence p. 618
104. MIMS 1988, p. 6-313
105. Evidence p. 1708
106. Evidence p. 1709
107. Evidence p. 1739
108. Evidence p. 1443
109. In Camera Evidence p. 648
110. Evidence p. 1475
111. Evidence p. 1444
112. In Camera Evidence p. 607
113. In Camera Evidence p. 607

114. Evidence p. 1441
115. Evidence p. 1442
116. In Camera Evidence p. 605
117. Sub Section 19(5) Health Insurance Act 1973, as amended
118. Letter from Assistant Secretary, Drugs of Dependence Branch to Dr Brian Corrigan, 26 March 1987
119. Evidence p. 1439
120. Evidence p. 1010
121. Evidence p. 990
122. Evidence p. 1010
123. Evidence p. 1462
124. Evidence p. 1462
125. Evidence p. 1462
126. Evidence p. 1462
127. Evidence p. 1462
128. Evidence p. 1409
129. Evidence p. 1411
130. Evidence p. 1413
131. Evidence p. 1409
132. Evidence p. 1410
133. Evidence p. 1410
134. In Camera Evidence p. 648
135. Evidence p. 571
136. In Camera Evidence p. 654
137. Evidence p. 1443
138. Evidence p. 2110
139. Appendix 5 of this report
140. Evidence p. 709
141. In Camera Evidence p. 684
142. In Camera Evidence p. 685
143. In Camera Evidence p. 685
144. In Camera Evidence p. 685
145. In Camera Evidence p. 685
146. In Camera Evidence p. 567