

CoDe is the official organ of the BCU Coaching Scheme. Members are free to express their views within its pages. Articles and comments therefore reflect the thoughts of the author and do not necessarily state the policy of the National Coaching Committee. CoDe is programmed for publication with Focus. Contributions, including pictures, are welcome. Please send them to: BCU, Adbolton Lane, West Bridgford, Nottingham. NG2 5AS

THE AIM OF THE BCU COACHING SCHEME IS:

To promote the sport and recreation of canoeing and to ensure that newcomers are introduced to canoeing in a safe and enjoyable way and that they and those already in the sport are assisted to progress to whatever level and in whichever discipline within canoeing suits them best.

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PLEASE RESERVE THE DATE

BCU COMPETITION COACHES' CONFERENCE

6-7 February 1993
Holme Pierrepont, Nottingham

Saturday

CHILDREN ARE NOT SMALL ADULTS?

Leading national experts will discuss:

The Physiological differences

Are they ready to compete?

A coaching parent's view

Creating the opportunities - the Champion Coaching Project

There will be opportunities for each discipline to consider

its development plan for youngsters,
and the coaches' contribution to it.

Sunday

AT THE SHARP END

Creating an environment where excellence can flourish

Working together

Evaluating Physiological Testing Data

Please send sae to BCU office for details

1992

PADDLERS CONFERENCE

Incorporating the BCU National Coaching Conference

Friday 30 October - Sunday 1 November

Based at Lakeside - on the shores of Windermere
FAMILY FRIENDLY - CHOICE OF ACCOMMODATION
costing from £15

Whitewater tours (grades I-III) - Canoe Orienteering -
Night paddling (overnight!) - Lake Tours - Open Canoe
Workshops: sailing, catamarans, poling, slalom, kites;

Mini-marathon/time trials; Sea trips;

Voyageur 24' Canoe Racing; Illustrated talks;

Conference dinner; Coaching Scheme AGM.

*Licenced bar; Family/children's non-Conference activities:
obstacle course, zip wire, rock climbing, abseiling, archery*

Send sae to Keith Morris,
Lakeside YMCA, Ulverston, Cumbria LA12 8BD
for full information

ZEN AND THE ART OF KAYAKING

by RAY GOODWIN

An enquiry into methods of learning

I watched my three year old nephew bashing around with a paddle, afloat in 12 inches of water in a battered old kayak. In the two days prior he and his elder brother (aged 5) had paddled to Australia although strangely the boats did not leave the safety of my lawn. The intensity of their play in a world of their own imagination prepared them for the 'real' thing. With attention as focused as any competitor at Barcelona he drifted and spun about the pool.

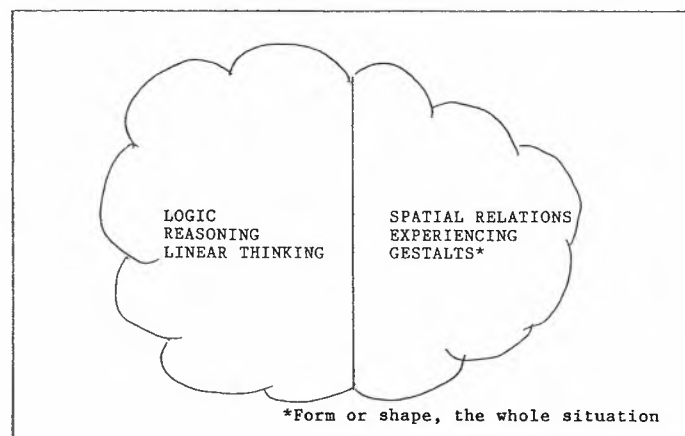
In contrast, I remember one seven year old sitting in a kayak, not in the least fearful of the water but still tearful, wanting to know what to do. It was the first minutes of a session, the water flat calm and two feet deep. The other children were engrossed in experimenting with these new toys; this girl sat waiting to be told how to do it. She was already in the situation where the expert was the font of all knowledge and with no faith in the ability that had enabled her to learn to walk and run. She had been taught how not to learn.

KAYAKING RIGHT

There is, in many cultures, a belief that human consciousness can be split into two. The Hopi Indians drew a right-left split between intellectual and intuitive activity. The Chinese Yin-Yang symbol expresses the duality of human consciousness.

The duality is supported by some medical research into the functions of the left and right hemispheres of the brain. It was found that the left side seems more important for intellectual and analytical work, the right being associated with holistic, intuitive work. Even though research suggests that this is not quite the case we are left with a useful metaphor as a model.

Gallwey in the Inner Game identifies this split as Self 1 and Self 2. Self 1 being the conscious thinker, Self 2 the non-conscious doer.



In *Skiing Out of Your Mind* Gallwey states that, 'we use one or other mode of conscious, but not both, at any one time. This means that if you were trying to solve a difficult intellectual problem you would have more difficulty balancing on a set of skis'. The Inner Game describes ways of quieting Self 1 so that Self 2 can become the controlling influence in performance, and consequently learning can be enhanced through experience.

Proficient people in many sports have described this split. The Self 1 quiet, almost observing the action, time slowed, awareness total.

'Many tennis players describe times when the ball, coming at them at 100mph or more, seems to be transformed into a large, fuzzy grapefruit sized object; the ball slows down or even stops, as if waiting to be hit'.

[Abraham; *Skiing Right*]

Indeed it was a combination of this type of experience, contrasted with disasters at critical moments when Self 1 took charge, along with an interest in eastern philosophy that led to Gallwey's Inner Game theories.

In Zen Buddhism it appears it was this sense of heightened awareness that could be attained through the martial arts, calligraphy, the tea ceremony or indeed any physical activity. Although meditation was considered a purer way to enlightenment it was accepted that a warrior could make greater progress in three days than a monk with one hundred days of meditation. In Zen Buddhism we have a tradition of teaching that stretches back to the 6th century in China and the 13th in Japan. The practise of Zen is inquiry into the nature of self and associated with extreme detachment, fearlessness and meditation.

To quote Abraham again, 'In skiing, we draw on the right brain capabilities of holistic perception, rhythm, spatial relationships and simultaneous processing of many inputs. Left brain functions are largely not involved'.

One Autumn I worked in a shoe factory earning money for a winter's ice climbing. John invited me to watch as he distracted another worker. This third person was working at the end of a production line, folding cardboard blanks into boxes, placing shoes into them and then stacking them. This action required a curious and repetitive little dance with hands and feet. John called the box man across. I could barely conceal my amusement; throughout our chat the dance did not slow or stop although now he was nowhere near boxes or shoes. The box man was totally unaware of what was happening, the right brain went on its programmed way while the left engaged us in conversation.

Consider the student that you have just taught support strokes to; they kayak down a rapid, start to capsize, drop the paddle and stick out a straight arm in a vain attempt to save themselves. The left side of brain is too busy being frightened to do anything and the right makes the same action as if the body was falling to the ground. In kayaking, as in Judo, we aim to replace this reflex with a more useful new one. Indeed, a support stroke is only really learnt when it can be done without thinking

This all confirms our insistence on minimising verbal instructions while teaching a paddling skill. The right brain learns best by action.

AWARENESS

I hear and I forget,
I see and I remember,
I do and I understand

Chinese Proverb

People generally remember:

10% of what they READ
20% of what they HEAR
30% of what they SEE
50% of what they HEAR AND SEE
70% of what they SAY AND WRITE
90% of what they DO

[Abraham]

'Awareness must accompany practice in order to achieve results. The clearer the awareness of the situation, the more learning that can take place'. [Abraham]

Gallwey suggest using some form of scale to enable the students to become more aware of what they are doing. Care should be taken in that it should be the person's own scale and simple to use. I am suggest a scale of 1 to 5 or perhaps maybe 'none, little, medium, maximum' but the student will decide where the divisions lie. Make the scale too intricate and it becomes self defeating; the pupil becomes so involved with the workings of the scale that any chance of awareness vanishes.

I almost always introduce edging by involving a simple scale. For many pupils used to the absolutes of some teaching they need reassurance. A frequent question asked at this stage: "Is this a 4?" I often respond with a shrug and "It's your scale, you tell me?"

When technique is immature the heart is tense, and one cannot move as one should. So the practice of the techniques is by 'feeling'. Zen Teaching.

The use of video is useful in making people aware of what they are doing. "Oh, so that's what I was doing." I rarely have a video available and so have experimented with myself being an action replay machine. For instance in a situation where I have tried correcting a particularly persistent fault but the student can not picture where their stroke differs from mine. By imitating their action I can make them aware of what they are doing before modifying their performance. Whenever I have tried this technique it appears to be effective.

VISUALISATION

Consider the difficulties of learning to drive and in particular in changing gear. The left brain is busy choosing the route, controlling the pedals, turning the wheel and attempting to shift gear. Yet soon all the control is done by the right brain without thought; the left may say corner coming up, change to 3rd but it will be the right that makes the shift. Once we accept this split in function then anything that engages the right is useful and visualisation is a powerful tool in this.

Visualisation is seen as the tool of top competitors but warrants use by paddlers of any standard. The choice of a route down a difficult rapid is a left brain function, however then the visualisation starts and the right brain is engaged as the paddler works out moves and strokes. When truly effective this process is sometimes accompanied by involuntary muscle movements. The brain is sending out weaker versions of the electrical impulses that are necessary to control the real muscle actions that will be necessary later. The right brain is having a practise run.

Visualisation may be introduced early in white water paddling. At first, like any other skill, it will not be very effective, it requires work.

Normally, I first introduce visualisation in combination with an introduction to reading the water. The students are asked to walk a rapid working out what the water is doing, then report back as individuals to me. I avoid any mention of how to paddle it at this stage. With an increased awareness of the water I then ask them to work out how they will paddle it; sometimes this will need adjustment. Individuals can set their own goals. Before paddling, another minute or so can be spent doing a mental rehearsal. If a particular stroke is necessary then it can be rehearsed on the bank.

These early attempts at visualisation are often inaccurate. "It was much faster than I imagined", is a common comment. The student often needs reassurance at this stage that the technique will become useful in time. Running a rapid several times in succession aids the accuracy of the visualisation; each time the paddler gains more information on which to build their mental picture.

At the end of a session I often ask a student to visualise a particular move that was successful. In the case of using the same river on several days I can get them to visualise paddling a section or performing a sequence that we will attempt the next day.

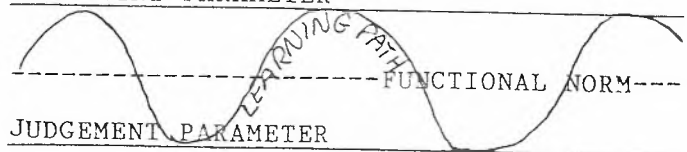
Normally, by the end of three or four days I find students, without prompting, are giving themselves a moment, perhaps with eyes closed, before running a rapid. Visualisation has become a useful tool; they have been convinced of its worth.

JUDGEMENT

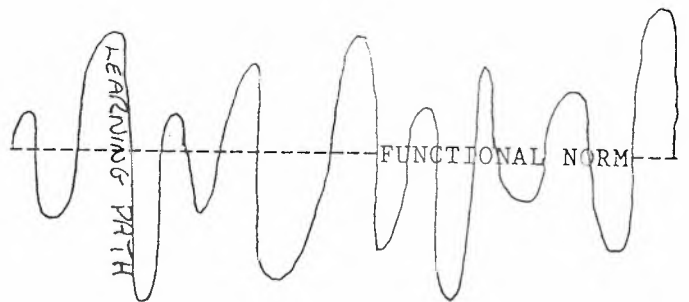
A marksman sighting in a rifle does not expect to hit the bull. He looks to where the bullet hit the target so that he can adjust the sights. He is being non-judgemental; his performance is not good/bad, right or wrong.

Too commonly, we as individuals, judge our own performance. We consider an error a 'bad' thing and not as an opportunity to sight in. I remember one friend who was an excellent kayaker except when surfing a wave. While the rest of us were having a hoot he would try harder and harder, each failure making him angrier still. The rest of us would have failures too but we were laughing, we could absorb the lessons. By labelling things good/bad, right or wrong we engage left brain functions and limit sensory feedback.

JUDGEMENT PARAMETER



Performance vacillations are few and are judgementally curtailed by pupil or instructor. "Experiencing" is essentially suppressed. [Abraham]



Experimenting goes largely unchecked thus allowing a wide basis for the learner to glean from. [Abraham]

Often the criteria for a student making a judgement about a new skill is set by our 'perfect' demonstration. The judgement parameters have been set. Two strokes I have been experimenting with are given below. However I am only concerned the judgements made and not in the full details.

The draw stroke

There is no reason why a teaching progression such as IDEAS should not be used. It is introduced as a stroke that can be used to make the boat spin or go sideways. It is important to realise that this is not the 'Discovery' method; the pupil is shown the technique which they then experiment with.

The bow rudder

Like most I use a 'part' method of teaching this stroke. The only real departure being that there is no demonstration of the end result beforehand, there is no basis for judgement. First a classic bow rudder position is taught but with the blade above the water and parallel to the boat. Second paddle along, attain position and hold for a second then drop the blade into the water; the boat may spin towards or away from the blade. Thirdly introduce a sweep to initiate a turn; now for the first time the student feels the blade beginning to bite. Fourth open the wrists. Only now do I explain what the stroke is for. Obviously plenty of practise and experimentation is still needed.

CONCLUSION

I am not a theorist who became a teacher, indeed the education lectures at college some twenty years ago seemed irrelevant and boring. Reading 'The Inner Game of Skiing' was a breakthrough for me in that for the first time I found something that explained so much of what I had felt and observed over the years. It awakened a fascination in the whys and hows of teaching.

Zen Buddhism was long established in China before the first masters went to Japan. Much of the early teaching was done in the form of written sermons for although the two nations shared a common script the spoken language was totally different. One pupil asked the master why they were given so many sermons when they were taught that enlightenment must come through meditation? The master's response: "To show a deaf man a door I point. To show a blind man I tap the door with my shoe"

At the moment a deer was heard to cry out in the.

The master shouted, "Where is the deer?"

The pupil gave a cry of understanding and asked, "Who is listening?"

Mental Preparation Technique for Racing and Training Brian Miller
CoDe No 38

The Inner Game of Tennis Gallwey

The Inner Game of Skiing Gallwey and Kregel

The Inner Game of Kayaking Robert Cunningham BCU

Skiing Right Horst Abraham

Skiing Out of Your Mind Loudis, Lobitz and Singer

Zen and the Ways Leggett

The Warrior Kaons Leggett

EXPERT HELP REQUIRED. The Tests and Awards Review Working Party has produced an outline modular system. The assistance of someone experienced in visual presentation of data would be warmly welcomed for ideas on how best to display the presentation for ease of understanding. Please contact Geoff Good at the BCU office.

Being aware of why things work has enabled me to improve my own teaching. It is not the Inner Game versus IDEAS or Visualisation versus Shaping. The teaching technique used will depend on the situation. In the end, I am interested in the most effective way of teaching a skill.

WHY DO THE AMERICANS DO SO MUCH BETTER THAN US ?

On my desk at present are two magazines from the States - *Sea Kayaker* and *The Drift*. *Sea Kayaker* is a commercial magazine, and *The Drift* is the magazine of a club based in New York. What they have in common is that they are both full of readable, well presented, in-depth articles. Time and again I have noticed how that sports publications from the other side of the Atlantic seem to have no shortage of good reading material, and high quality pictures to match.

CoDe has been fortunate over the years to have been able to publish a range of articles from articulate coaches and others. We are, however, now very short of material for the future. Publication of your article is (almost) guaranteed, so you won't be wasting your time in producing something.

Articles on 'approaches to coaching', defining or re-defining technique, or challenging widely held concepts, are particularly welcome. Cross-fertilisation is an essential ingredient for coaching evolution.

Do please put pen to paper during the coming dark evenings, and share your experience, beliefs, understanding, opinion, with the rest of us.

CANOEING HANDBOOK



The completely revised, re-written Canoeing Handbook is the only complete guide to the sport and pastime as practised in Great Britain

The new **CANOEING HANDBOOK** contains
560 pages of up-to-date information on all aspects

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**MEMBERS PRICE
£14.50**

DEAR CODE

Dear CoDe

I read with despair the notice of an impending increase in subscriptions once again. I am a working SI, also responsible for a BCU approved Centre's canoeing activities. I have been teaching canoeing both part and full time, in voluntary and professional capacities for 11 years. During this time I have kept up BCU subs in order to hold on to my qualifications.

I feel that it is time once again to bring up the age old discussion about the way Coaching qualifications and membership are forced to run hand in hand. Isn't it about time the BCU saw how other bodies coped with this issue and refrained from insisting that often unpaid instructors must pay for the privilege of introducing and training others in our sport.

This year I return to education to complete a degree. What with other rising costs and the ever accumulating local council taxes, I am unable to afford my renewal. So it is with deep regret that I say farewell to the BCU. I will continue to participate with enthusiasm for the sport, but not for an organisation that I feel abuses the privilege of a monopoly.

DAVID WHEATLEY, Cumbria

DofC responds: Your Union is of course faced with rising costs also. If subs did not at least cover inflation there would be a shortfall of some £12,000 in purchasing power in the next financial year.

It is true that BCU instructors teach many thousands - in fact, hundreds of thousands - to canoe each year. Unfortunately, a very small percentage only are persuaded to join as a result - somewhere in the region of 0.36% of the total.

This is not to belittle the efforts of instructors in any way. We are still talking about 1,800 members a year approximately, which is very significant for the BCU, and the work of Coaching Scheme members, and the contribution they make to the sport, is never underrated. However, it does indicate that there is considerable untapped potential, and if we could achieve a much higher uptake, then the requirement for instructors themselves to be comprehensive members could, perhaps, be reviewed.

Less than 20% of our membership are involved in neither competition nor coaching. It is therefore the case that in the main only those who can be 'coerced' into joining, do so.

When I raise in committee the complaint regarding the requirement for membership which arises from some instructors, other voluntary workers in the Union at once remind me that instructors can at least pass the cost on by charging those whom they teach. Even when no direct charge is made, our discount system on Star Tests, for instance, redeems the membership fee after 50 tests have been undertaken.

Those who give their time and talents, and generally cover their own travel costs, in organising events, running sections of the sport, negotiating access and facilities, and so forth, do so without any means of achieving redress for their outlay. Without this massive voluntary input the activity would cease to function.

As a voluntary member for many years I was happy to make a contribution to support those ends, and, like so many others, to put in personal time and effort as a voluntary organiser of a range of activities and events for other canoeists to enjoy.

I am saddened on the odd occasion when I receive letters which indicate a lack of understanding of what the purpose of the Union really is, and a failure to understand the nature of the commitment which is required to achieve what we are able to do.

The membership fee is not a price which we pay for a particular product. It is a token contribution which we all make to enable a system to operate which services, develops and promotes the activity.

A number of other organisations do have to insist upon membership to make ends meet. If we didn't require Coaching Scheme members to do so, the Union would be about £48,000 short of its current funding potential, and in a downward spiral. With even less resources there is even less ability to give attention to revenue raising.

It should be noted that the decision that membership is necessary for the holding of coaching qualifications is made by the elected members, not the paid staff.

ANNUAL MEETING OF DELEGATES

Members are reminded that the annual meeting of delegates will take place at the YMCA Lakeside at 1700 on Saturday 31 October 1992.

Agenda

- 1 Minutes of previous meeting
- 2 Matters arising
- 3 Election of officers
To note that as no further nominations have been received the Chairman, Graham Lyon, and the Treasurer, David Waddington, have been returned unopposed.
- 4 Annual report from the Director of Coaching
- 5 Financial Report
- 6 To consider Motions (please see proposal below)
- 7 Any other business (to be notified to Chairman in advance of the meeting please)

The following Motions to amend the Coaching Scheme Rules are proposed by the National Coaching Committee. The changes to rules 6 a, b and c are merely tidying up the wording to conform to the meaning and the practice for the last ten years !

The additional rule 6.1 is proposed to ensure that where members require an election to take place for an LCO or RCO, agreed machinery exists for this to be conducted in an open, fair and democratic manner.

Motion to amend the Rules of the BCU Coaching Scheme:

Rule 6 (a). Delete 'Annual General Meeting'. Insert 'Annual Meeting of Delegates'.

Rule 6 (b) Delete 'AGM'. Insert 'Annual Meeting of Delegates'.

Rule 6 (c) Delete 'AGM'. Insert 'Annual Meeting of Delegates'.

Add the following to Rule 6:

6.1 In situations where no rules have been determined by the local or regional coaching panels, the following shall apply:

- 6.1.1 After a lapse of three years, upon the request of two or more current members of a coaching panel a notice shall be posted to all panel members in the case of an LCO, or placed in the next available edition of CoDe in the case of an RCO, announcing an election and asking for further nominations, which must be proposed and seconded by current members of the panel, and contain a brief summary of the candidates canoeing and coaching background. The notice will be placed by the current LCO, or RCO, or in cases where this is necessary, by the Regional Chairman or the Director of Coaching. A closing date will be stipulated at least 21 days following the publication of the notice, and the name and address of a 'returning officer' included, to whom nominations must be sent.
- 6.1.2 A notice will then be sent direct to all panel members in the case of an LCO, or posted in CoDe in the case of an RCO, listing the candidates and their background, and inviting votes by a stipulated date. A formal voting paper may be circulated, or a written return sought from members stating "I wish to vote for (name)".
- 6.1.3 As an alternative, voting may take place at a general meeting of the Coaching Panel provided a notice to that effect has been published in CoDe or sent direct to all Panel members at least 21 days in advance. Voting in such instances shall be by simple majority through a show of hands. Proxy votes will not be permitted.
- 6.1.4 In cases where only one candidate is nominated or re-nominated by the stated closing date, no election will be required. The name and address of the LCO or RCO concerned shall be confirmed in the next available edition of CoDe.
- 6.1.5 The accidental omission to give notice to, or the non-receipt of such notice by any person entitled to receive notice thereof shall not invalidate the election.

PROFESSIONAL INDEMNITY

'Professional indemnity' insurance cover has been available to members who earn part or all of their income from paid instruction, at an annual premium of only £7.50.

Regretfully so few members have taken up this option that the Insurers have now had to withdraw the offer.

From 1 November 1992 onwards those wishing to be covered for the risks involved must negotiate direct with Perkins Slade, Elizabeth House, 22 Suffolk Street, Queensway, Birmingham B1 1LS.

A reminder

The third party indemnity provided through your membership applies world wide, and covers you for defending an action, and for any damages which may be awarded by a court, to a maximum of £2 million,

However the insurance has been negotiated on the assumption that you are a volunteer working in the voluntary sector - which includes receiving direct 'out of pocket' expenses.

Should you earn part or more of your living from your canoeing instruction, then you are in an enhanced 'duty of care' relationship with your clients. Should you be successfully sued for negligence following an accident, the court is likely to award a higher level of damages than if you were teaching entirely voluntarily. The insurance company therefore require an increased premium for the increased risk.

Normally your employer should carry adequate protection, but if you are concerned that you might be in a 'paid instruction' situation which is not covered in any other way, you are advised to contact Perkins Slade at the above address, or the National Coaching Foundation, 4 College Close, Beckett Park, Leeds LS6 3QH.

The Cover through NCF is available at £5.00 per annum but is not so wide in its scope.

Please note

The indemnity does not include cover for those in your employment. Please contact Perkins Slade who are able to negotiate this.

coaches notes

SPRINT CANOE RACING TECHNIQUES

Course for Instructors

24-25 October

A two day course to provide practical experience and theoretical fundamentals for practising instructors and coaches in single blade teaching techniques.

Details from Tibor Herbent, 4 Chiltern Leys, Coundon, Coventry CV6 1BL (0203 592247).

BCU COACH AWARD (Recreation)

The BCU Coach course at Plas y Brenin ran in August with a full complement of 10. In addition, the Cumbria modular course finished its progression, and an East Midlands course commenced.

Plas y Brenin is offering two weekend courses for existing and trainee coaches to reach trainee coach status in alternative disciplines:

24-25 October

Sea Kayak

21-22 November

Open Canoe

Full details: Plas y Brenin, Capel Curig, Gwynedd LL24 0ET (06904 345).

ELECTION OF WESSEX REGION RCO

The election of the Wessex Region RCO recently took place. Candidates were the existing RCO, Peter Pendlebury, and the Wiltshire LCO, Doug Manning.

The result of the postal ballot of the Local Coaching Organisers for the Wessex Region was the re-appointment of Peter Pendlebury, for a term of a further three years.

Our thanks to Terry Cripps, the election scrutineer.

OPEN CANOE RACES

The final sailing race for open canoes under the auspices of the Open Canoe Sailing Group (06973 51688) will be held at the Royal Canoe Club from 31 October - 1 November.

PATHWAYS TO EXCELLENCE

The bi-annual conference on The Growing Child in Competitive Sport run by the British Institute of Sports Coaches is to be held at the Hilton National Hotel, East Midlands Airport, from 4-6 December. Full information from BISC, 2 College Close, Beckett Park, Leeds LS6 3QH.

DIETARY HELP HOTLINE

The Sports Nutrition Foundation have appointed a Dietitian/Administrator for the Sports Nutrition Foundation who is available on Mondays, Tuesdays and Wednesdays on 071 250 0493.

The Sports Nutrition Foundation acts as a central source in providing information, advice and expertise which is consistent with current scientific knowledge and opinion on the important subject of nutrition for people involved in sport at all levels.

WANTED - AN APRICOT

The monitor (screen) of an elderly, but very useful, Apricot computer, used, among other things, for compiling these notes for CoDe, has recently 'given up the ghost'.

The charge for looking at it is £40, before repair or replacement costs! We are sure that 'out there' are hundreds of these monitors, discarded by large companies, and gathering dust.

If you are aware of an AP1200 xi monitor anywhere, destined for 'the scrap heap' please let us know.

HUMBLE APOLOGIES

There was a most unfortunate typing error in the last issue of CoDe, which regretfully went unnoticed. In the article *The First Deaf Instructor?* the word 'deaf' appeared as 'daft'.

Although there are undoubtedly some daft canoeists around, we are sure that Simon, the subject of the article, is not one of them, and would like to apologise to him for any embarrassment caused.

Asthma and Athletes

By Dr Peter Thomas

Asthmatic people should be able to compete at international level if they wish. Indeed, there are plenty of examples of asthmatic athletes who have gained Olympic honours and medals: Steven Redgrave (a double Olympic Gold Medalist), and Jackie Joyner-Kersey (Olympic and World Champion long jumper and heptathlete) are just two notable examples. Planned and controlled exercise programmes will help in the overall medical management of asthma, and those asthmatics who have not previously taken regular exercise should be encouraged to join in at the local sports club as normal, fully-integrated members of the club: they should not be treated as invalids.

About Asthma

Asthma is a reversible condition caused by narrowing of the airways. As the diameter of the trachea and bronchial tubes leading to the lungs decreases, so the resistance to air flowing through them increases, making it difficult for the asthmatic to breathe. The narrowing may be caused by the contraction of muscle surrounding the tubes or by the lumen becoming smaller due to swelling of the lining or to more mucus being secreted than is normal.

Up to fifteen per cent of the population suffer from asthma at some time during their lives. In some people no specific cause can be found, but in others a variety of allergens may trigger off an attack, from pollen in the hay-fever season to moulds, dust, animal hair or feathers. Cold air, especially if dry, may start an attack, and all asthmatics may get worse if they have chest infections and when they are anxious. Some athletes will get exercise-induced asthma, which comes on six to ten minutes after finishing ten minutes or so of vigorous exercise.

The state of the bronchial tubes can be assessed by using a peak flow meter. The athlete breathes out as hard as possible into the small hand-held meter, which measures the Peak Expiratory Volume (PEV). As the airways narrow during an attack and the resistance to the flow of air increases, so the PEV decreases. Asthmatics should be encouraged to use a peak flow meter regularly during training to monitor the state of their airways. In the case of exercise-induced asthma, the PEV rapidly decreases after the cessation of exercise, reaching a low six minutes later. The PEV then returns slowly to normal, taking up to sixty minutes to reach normal pre-exercise levels. These changes are illustrated in Fig 1.

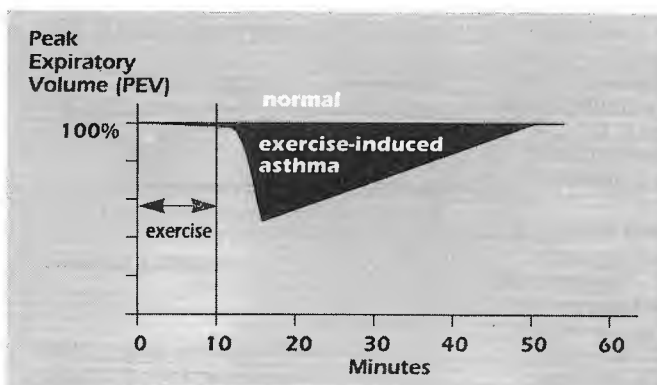


Fig 1 Peak Expiratory Volume changes in athlete with exercise-induced asthma

Asthmatics will complain of increasing shortness of breath and difficulty in breathing. They may find themselves unable to exercise normally. Exercise-induced asthma is characterized by a dry cough coming on a few minutes after exercise and lasting up to an hour or so. A wheeze may be audible and the flesh between the ribs may be drawn in as the athlete breathes in. The athlete's pulse rate may also increase above the expected level for a particular type of exercise.

Treatment of asthma

Fortunately asthma can be controlled in a number of ways. Three main types of medication are given to athletes, all of which are quite within the rules laid down in the International Olympic Committee's doping regulations. All three can be inhaled either in aerosol form or as a fine powder. They are sodium cromoglycate ("Intal"), salbutamol ("Ventolin") and the corticosteroid beclomethasone ("Becotide"). Note that corticosteroids are not the same as anabolic steroids! Sodium cromoglycate is generally used as a prophylactic drug when the asthma is triggered off by an allergy – to pollen, dust, feathers or animal hair. Salbutamol acts quickly to reverse the muscle spasm around the airways; it can be used before, during or after exercise. Corticosteroid is generally used as a backup to either of the other two drugs, and acts on a more long-term basis (over a few days).

Asthmatics should be encouraged to increase the quality and intensity of exercise gradually in order to allow the body to adapt to the training load. If adequately controlled, asthmatics can reach the top in every sport. In my own

sport of rowing, Steven Redgrave, a double Olympic gold medallist, has asthma.

Chest infections should be treated early, and exercise in cold dusty gyms avoided if at all possible. Contact with animals and feathers should be reduced, and the athlete may need to take his or her own pillow if staying away from home. The athlete should sleep with the windows closed in the hay-fever season in order to reduce the pollen count,

which reaches a peak later on in the day. The athlete must be responsible for his or her own treatment and should carry an inhaler at all times.

For further advice contact:

The Asthma Society and Friends of the Asthma Research Council,
300 Upper Street, London N1 2XX.
Tel: 071-226 2260.

The British Lung Foundation,
12 Onslow Gardens London SW7 3AS.

The above 'Asthma and Athletes' advice is taken from an article entitled, 'Dealing with Asthmatic and Diabetic Athletes', first published in the Summer 1989 issue of **Coaching Focus**, the technical journal of the NCF. This issue focused on The Coach and Sports Medicine, and other articles which also appeared included: 'Treatment and Screening of Injury'; 'The Coach's Role in Rehabilitation'; and 'The Sports Injuries Clinic'. **Coaching Focus** is published three times per year, with each issue looking at one topic in sport in detail. Subscription rates are currently £10.00 per annum. Call 0532 744802 for a subscription form.

COACH AND ATHLETE

['Coach and Athlete' is a clip-and-copy guide featuring information of value to both the coach and the sports performer. Permission to reproduce and circulate this guide is granted by the NCF for non-profit, educational purposes]

SOFT TISSUE INJURIES

At least 80 per cent of all sports injuries affect the soft tissues.



Skin

Blisters are usually caused by new shoes or equipment. They have a protective function, and should normally simply be covered. If absolutely necessary, you can puncture the blister with a sterile needle and then tape up the area to prevent further friction. Break-in new footwear slowly and apply vaseline to friction areas.

Abrasions must be cleaned thoroughly to remove all dirt. Use running water with soap or an antiseptic. Abrasions tend to weep and usually need to be covered by a special sterile dressing that will not stick to the grazed surface. Many abrasions can be left open, and a healthy scab will then form quickly.

Cuts – Stop the bleeding by direct pressure over the cut, squeezing the edges of the cut together. Cuts must be cleaned using running water and antiseptic powder or solution. Never apply creams to cuts. Cover the cut with a dressing. Some cuts need medical attention.

If the skin has been broken, **tetanus** (lock-jaw) can occur. Everyone involved in sport should ensure their tetanus immunization is kept up to date by checking with their doctor on a regular basis.

Muscle injuries

A muscle consists of countless fibres linking together inside a sheath of tissue. The fibres and sheath can tear, causing bleeding.

Pulled muscle – A pulled muscle is usually an intrinsic injury when a few fibres of a muscle tear as a result of inadequate warm-up or tiredness. It commonly affects muscles acting on two joints, such as the hamstrings at the back of the thigh.

Torn muscle – In certain injuries, large numbers of muscle fibres may be torn. Major bleeding occurs in the muscle, causing a painful swelling which restricts thigh movement. This is known as a "dead leg". If you suspect a complete tear of the muscle get medical help.

Tendon injuries

Tendons are cords which connect muscle to bone and transmit the force of a muscle contraction.

Tendonitis – An inflamed tendon which follows an indirect, over-use injury and commonly affects the Achilles tendon, the groin or the wrist.

Rupture – Partial or complete rupture of a tendon can occur under violent stress: for example, an Achilles tendon rupture during squash. If you suspect a rupture of a tendon get medical help.

Ligaments

Ligaments act as guy ropes adding stability to joints. They are band-like structures made up of inelastic fibrous tissue. The most commonly injured ligaments are those supporting relatively unstable joints such as the knee and the ankle.

Torn ligament – When a joint is twisted through an abnormal range of movement the stabilising ligaments may be damaged. Either a few fibres may be torn (sprained ligament) or there may be a complete disruption of the ligament. If, because of unusual movement, you suspect a complete tear of a ligament, get medical help.

Bruises

It will be apparent that all soft-tissue injuries are associated with bleeding in the tissues. A bruise or haematoma will develop. Recovery from an injury is related to the amount of bleeding in the tissues, the rate of disposal of the bruise and the area of tissue affected.

Management of bruises, muscle, tendon and ligament injuries

BASICS – Basic Athletic/Sports Injury Care

- R implies Rest of the injured part
- I Ice applied to injured part
- C Compression bandaging
- E Elevation

The measures summarized above are designed to stop continuing bleeding in the damaged tissues and thus promote early recovery.

When using an ice pack you must be

very careful to ensure that you do not burn the skin to which it is being applied. Therefore, protect the skin with a layer of grease or bandage. Ice should then be left in position for 5-15 minutes till the skin turns red. The injured part should be rested, bandaged and, if possible, elevated if it is a limb, for up to 24 hours.

Anti-inflammatory pain-killing tablets such as aspirin, if taken within four hours of injury, have been shown to reduce the amount of pain and inflammation in this type of soft tissue injury. This again promotes an early recovery of normal function. Do not, however, use local anaesthetics to relieve pain.

After the injured part has been rested for 24-72 hours, movements may be started within the limits of pain, gradually increasing the exercises over a 7-10 day programme, at which time the majority of relatively minor muscle, tendon or ligament injuries will have fully recovered.

If you suspect that there may be a complete tear of a muscle, tendon or ligament, the patient requires medical attention.

(NB: Anyone who coaches a sport should be able to give first aid, including cardio-pulmonary resuscitation. Your first aid skills should be reviewed regularly: go on a course from time to time so that you are always familiar with proper up to date treatment methods. An appropriate first aid award is highly recommended, whilst The National Coaching Foundation's Key Course, 'Prevention and Treatment of Injury' adds complementary information for coaches. The NCF Advanced Workshop, 'Sports Medicine for Coaches' is also highly relevant.)

This information is adapted from the NCF's coaching handbook No. 3, 'Safety First for Coaches'. To order this publication, call Coachwise Ltd on 0532 743889.

For NCF course information and bookings, call the NCF Course Hotline on 0800 590381 (1-5 pm).

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