Sports medicine rendezvous: connecting Everest, muscle strain and sudden cardiac death

Karim M Khan

As this issue of BJSM is being uploaded from Tehran to Tallahassee and from Dundee to Dunedin, sports medicine clinicians gather for Rendezvous II at that renowned hub of critical analysis – Caesar’s Palace, Las Vegas. BJSM readers from conference anchor groups – the American Medical Society for Sports Medicine, the Canadian Academy of Sport Medicine, the American Osteopathic Academy of Sports Medicine and the Australasian College of Sports Physicians – will find inspiration in the ancient inscriptions of Nevada’s hallowed halls. Attendees from the world over will feel at home with the Eiffel Tower, the Pyramids and the Grand Canal all within walking distance.

If jet lag, a long stint at the Everest Casino, or other misadventure should lead to headaches, BJSM has the answer. The holy grail of altitude researchers has been to find out why some people develop acute mountain sickness (AMS) and others don’t. Does AMS result from raised intracranial pressure in those unable to buffer the increase in cerebral volume that occurs at altitude? Until now, an impossible question, as even mountaineers generally don’t volunteer for craniotomy to help an academically stranded colleague secure a publication. Now Andrew Sutherland and colleagues, from Vegas’ sister city – Oxford – report intracranial pressure measures obtained with ultrasonography to monitor optic nerve sheath diameter (see page 183). They provide novel and strong evidence that intracranial pressure increases at altitude and is associated with AMS. It seems to me they may also have unravelled the mechanism behind Joseph Conrad’s turn of phrase: “That beggar belonging to the Rajah scouted downhill with his eyes hanging out of his head” (Lord Jim, 1900).

Given that Caesar’s Palace was the home of classic boxing bouts – Sugar Ray Leonard, Marvin Hagler, Muhammad Ali (but not all at once!) – this issue includes physiotherapists’ assessment of key clues to diagnosing concussion. Despite physios’ undoubted excellence in managing sports medicine conditions, there was a gap between what they thought important and the current guidelines (see page 175). Would physicians have done any better? We may need a more tailored package of the Prague concussion guidelines.

Turning lack of research into practice is tough too, yet evidence often lags behind clinical innovation. Physiotherapist Jenny McConnell reported a long-term solution for patellofemoral pain in 1986; Crossley’s randomised controlled trial proving McConnell correct appeared in 2002. Parachute efficacy has evidence of level 4. Just as parachutes look good when your plane is in a death spiral, level 4 evidence appeals to the hamstrung athlete as the Olympics loom. Therefore, UK Sport held an expert think-tank on ‘muscle strains’ in London. What generated the hottest debate was the early management of strains – including using injection – in the elite athlete (see page 158). The group recommended that clinicians ‘consider injection therapy as an important part of the landscape of management options’. Do you agree? Respond Rapidly through www.bjsm.bmj.com.

Thanks to organisers’ many sleepless nights, another international expert panel convened in Seattle to prevent sudden cardiac death in young athletes. University of Washington course chair Dr Jonathan Drezner recruited none other than Professor Domenico Corrado from The University of Padova, Italy, to share the Italian experience – a 26-year year commitment to compulsory preparticipation ECG that has undoubtedly prevented deaths from cardiomyopathy. Equally impressive, passionate, and very respectful of the agony of parents who have lost children to sudden death, was Dr Richard Page (Washington). He argued that in the USA alone, mass ECG screening of young athletes would cost $2 billion and would exclude 2000 children from sport for every life saved.

Matthew Wilson and colleagues enter this ring (see page 207). We learn of nine UK adolescents who were at risk of death and yet had no relevant personal or family history. The Wolverhampton and Liverpool researchers provide a best practice model for pre-participation cardiac screening in young sportspeople. They support the Italian, and now pan-European, position that resting 12-lead ECG should not be optional. Yet this raises the inevitable question – can society pay? If not, is it fair that kids of those who can afford testing are safe to play, while others might head out for what proves a fatal pickup game? We invite submissions on this critical issue (karim-khan@ubc.ca or www.bjsm.bmj.com).

Finding ways to move these debates forward, helping clinicians and scientists make better decisions, is core business for BJSM. If you are lost in Las Vegas and suffering neither headache nor asystole, please rendezvous to the BJSM ‘Town Hall’ on Wednesday 26 March. Share your ideas on how this journal and website can better serve the fields of physical activity, exercise science and medicine. But if you are in Eritrea, Iran, Finland, Belgium, Scotland, New Zealand or Germany – to list just some of our authors’ homes – fire off an email or jump on the web (www.bjsm.bmj.com). Don’t let jokers gamble with the future of BJSM – have your say too.

Competing interests: None.