

Problems arise from two mechanisms.

(1) Loss of the active structures that provide intrinsic pelvic closure (the transversus abdominis and the pelvic floor muscles) because of

- inhibition of the transversus abdominis caused by first onset low back pain²;
- pain inhibition through joint inflammation: "osteitis pubis", hip joint pathology, and sacroiliac/lumbar spine joint dysfunction;
- a tear of the conjoint tendon/inguinal ligament disrupting the origin of the transversus abdominis;
- past abdominal surgery inhibiting contraction or affecting the nerve supply to the transversus;
- tearing of the pelvic floor muscles during child birth;
- weakness of the pelvic floor muscles secondary to poor toilet habits.

(2) Loss of passive structures

- pelvic ligamentous laxity due to either body type (hypermobility) or external trauma (either single incident or prolonged postural loading), or hormone induced ligamentous laxity (pregnancy);
- laxity of the sacroiliac joint ligaments will cause loss of the closure moment at the sacroiliac joint. A very small loss of ligament strength here can have a profound effect on the closure moment. Is this how Vleming's posterior sling exercises work on post partum women? Further is this the mode of action of sclerotherapy of the sacroiliac joint ligaments?

Peripelvic stability

Once the pelvis is stable and we have a firm foundation, we can look at the pelvis reacting with the rest of the body.

Pelvis on hip joint (pelvifemoral control)

- Does the knee roll inwards as the subject single leg squats?
- Does the pelvis dip as the patient reaches single leg stance?
- Is the lack of pelvifemoral control a strength or timing problem around the hip joint (gluteus medius and gluteus maximus) or is it an inability to appropriately weight transfer on to that side because of hip, knee, or ankle problems, burnt out nerve root pathology, or just disuse of one side because of chronic injury.

Pelvis on lumbar (and thoracic) spine (lumbopelvic control)

- This is concerned with ability of the deep multifidus to contract to control the lumbar segments and the superficial multifidus to orientate the spine on the pelvis.³

Functional stability

Once the muscle strength and activation patterns are in place to allow force transfer through the pelvis, then linking these activities into normal activities and actions and conditioning the lumbopelvic complex can take place. This is really just an "on-field" extension of peripelvic stability. Once the athlete has all the necessary components to hold the pelvis stable on the femur and lumbar spine, can they coordinate that into their particular sporting or every day activity?

This type of stability is more concerned with technique, coaching, and video analysis. Also, as conditioning will no doubt affect the fatigue status of the athlete, high level physical conditioning allows the athlete to maintain a stable pelvis without physical fatigue, hence appropriate strength/endurance and power training is applicable to the type of athletic activity and the stage of the athletic season.

Most gym based strength, conditioning coaching, and fitness programmes fall into this category. However, it is our belief that, if the intrapelvic and peripelvic problems are not addressed initially, that is where these patients break down. Conversely, if inadequate conditioning is performed before return to sport/competition, then the athlete will break down, as there is no transmission of their rehabilitation on to the field of play.

People present at various points along the continuum of disease. Some lack functional stability, and some lack peripelvic strength and coordination, but have a stable pelvis. Others have a pelvis that swings in the breeze.

A recreational athlete with a sedentary occupation does not need the same level of intrapelvic strength and endurance as an Australian Football League onballer or elite soccer player. Yet someone doing a lot of vacuuming and weight bearing with poor ergonomics needs quite good intrapelvic and peripelvic strength without the need for the endurance of an elite athlete in these muscles.

We look forward to hearing the thoughts of others on this topic.

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References

- 1 **Richardson CA**, Snijders CJ, Hides JA, *et al*. The relation between transverse abdominis muscles, sacroiliac joint mechanics and low back pain. *Spine* 2002;**27**:399-405.
- 2 **Hodges PW**, Richardson CA. Inefficient muscular stabilisation of the lumbar spine associated with low back pain. *Spine* 1996;**21**:2640-50.
- 3 **Moseley GL**, Hodges PW, Gandevia SC. Deep and superficial fibers of the lumbar multifidus muscle are differentially active during voluntary arm movements. *Spine* 2002;**27**:E29-36.

New Faculty of Sport and Exercise Medicine in Ireland

The launch of the new Faculty of Sport and Exercise Medicine jointly by the Royal College of Physicians of Ireland and the Royal College of Surgeons in Ireland on Tuesday 19 November 2002 should not go unheralded. The first dean of the new faculty is Dr Michael G Molloy of Cork and rugby football fame. This is a highly significant event in the advancement of the discipline of sports medicine in these islands.

The development of any discipline has been shown to have four separate functions defined by McWhinney:¹

- A unique field of action
- A defined body of knowledge
- An active research programme
- A rigorous training programme

Denis Pereira Gray² added to these four functions an important codicil, "In the development of any discipline, the literature is the key".

Because the *British Journal of Sports Medicine* has an international editorial board, which includes Professor Moira O'Brien of Trinity College Dublin amongst its ranks, it would seem appropriate that its editor should open a line of communication with this new faculty to unlock any obstruction in the path of this fledgling.

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References

- 1 **McWhinney IR**. General practice as an academic discipline. Reflections after a visit to the United States. *Lancet* 1966;**1**:419-23.
- 2 **Gray DP**. The emergence of the discipline of general practice, its literature, and the contribution of the College "Journal". *J R Coll Gen Pract* 1989;**39**:228-33.

Muscle dysmorphia in weightlifters

I would like to raise a concern with regard to the article "Muscle dysmorphia: a new syndrome in weightlifters" by Choi *et al*.¹ Although chronic obsessive behaviour related to fitness and weightlifting is genuinely a concern for both sexes, Choi *et al* fail, in my opinion, to present a valid argument for the construction of "muscle dysmorphia" as being a separate and distinct subcategory of body dysmorphic disorder. Inclusion criteria and procedures in the study by Choi *et al* were identical with those used in the study by Olivardia *et al*²—they used identical study populations. Both Choi *et al* and Olivardia *et al* claim that differences exist between their cases (weightlifters preoccupied with their body image, namely insufficient muscularity) and controls (weightlifters not preoccupied with their body image) with respect to body image and a variety of other characteristics. However, in both studies, the aim of which was to distinguish muscle dysmorphia as a distinct clinical entity, individuals were classified as cases or controls on the basis of their body image perception. It is therefore hardly a surprise to find that men who obsess about their body image and who perceive themselves to be insufficiently muscular differ with respect to their body image and their perception of being insufficiently muscular from men who do not have the perception of being insufficiently muscular. Olivardia *et al* discuss this limitation, stating that, although this tautology exists, there are other factors that separate the two groups (higher lifetime prevalence of mood and anxiety disorders, use of steroids and other drugs, and higher scores on many Eating disorders inventory subscales). However, this evidence alone is not sufficient to indicate that these characteristics distinguish a muscle dysmorphia construct, as it is possible that, within this target population (male weightlifters), the proposed muscle dysmorphia characteristics in fact distinguish the other observed disorders. I would advise readers to take the conclusion of Choi *et al* that "... muscle dysmorphia may be one negative consequence of physical exercise behaviour ..." with extreme caution, as its validity as a distinct clinical entity has not yet been proven.

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References

- 1 **Choi PY**, Pope HG Jr, Olivardia R. Muscle dysmorphia: a new syndrome in weightlifters. *Br J Sports Med* 2002;**36**:375-6.

- 2 **Olivardia R**, Pope HG Jr, Hudson JI. Muscle dysmorphia in male weightlifters: a case-control study. *Am J Psychiatry* 2000;157:1291-6.

CALENDAR OF EVENTS

The International XVII Puijo Symposium: Physical Activity and Health - Gender Differences Across the Lifespan

25-28 June 2003, Kuopio, Finland

Further details: Puijo Symposium Secretariat. Email: puijo.symposium@uku.fi; tel: +358-17-288-4422; fax: +358-17-288-4488

The Cutting Edge: Joint Conference of The British Association of Sport and Exercise Sciences and The British Association of Sport and Exercise Medicine in association with the National Sports Medicine Institute

3-7 September 2003, Sheffield

Further details: R.M. Bartlett. Email: r.m.bartlett@shu.ac.uk

Football Australasia Conference

23-25 September 2003, Melbourne, Australia
Further details: Football Australasia Conference, P.O. Box 235, North Balwyn, Victoria 3104, Australia

17th Congress of the European Society for Surgery of the Shoulder and the Elbow (ESSSE)

24-27 September 2003 at the Convention Hall "Stadthalle" Heidelberg, Germany
Congress Chairman: Professor Dr med. habil. Peter Habermeyer; President of the Society: University-Professor Dr Herbert Resch.
Abstract deadline: 31 March 2003
Further details: INTERCONGRESS GmbH. Email: katrin.volkland@intercongress.de; Tel: +49 611 97716-35; Fax: +49 611 97716-16; website: www.intercongress.de

The 5th British Musculoskeletal ultrasound course

1-3 October 2003, Leeds, UK
Musculoskeletal sonologists from the UK and mainland Europe will cover all aspects of musculoskeletal ultrasound in lectures and tutorials. The course is open to radiologists, radiographers, and clinicians with a US imaging interest.

Further details: Gill Bliss, MR Department, Clarendon Wing, Leeds General Infirmary, Great George Street, Leeds LS1 3EX. Tel: +44 (0)113 392 3768; fax: +44 (0)113 392 8241; email: gillian.bliss@leedsth.nhs.uk

Back Pain Prevention and Rehabilitation

5 October 2003, Glasgow, UK

A study day with Professor Stuart McGill. *Further details:* Yvonne Gilbert, BASEMS Secretary, Royal College of Surgeons of Edinburgh, Nicolson Street, Edinburgh EH8 9DW; email: y.gilbert@rcsed.ac.uk; tel: +44 (0)131 527 3409. Organised by BASEM Scotland

The 6th STMS World Congress on Medicine and Science in Tennis in conjunction with the LTA 2004 Sports Science, Sports Medicine and Performance Coaching Conference

19-20 June 2004, London, UK

Keynote speakers include Professor Per Renstrom (SWE), Professor Peter Jokl (USA), Professor Savio Woo (USA), Dr Carol Otis (USA), Dr Mark Safran (USA), Dr Ben Kibler (USA), Prof Bruce Elliott (AUS), and Professor Ron Maughan (UK).

Further details: Dr Michael Turner, The Lawn Tennis Association, The Queen's Club, London W14 9EG, United Kingdom; email: michael.turner@LTA.org.uk

International XVII Puijo Symposium

25-28 June 2003, Kuopio, Finland

"Physical activity and Health—Gender Differences Across the Lifespan."

Further details: Ms Auli Korhonen, Project Secretary, Kuopio Research Institute of Exercise Medicine, Puijo Symposium Secretariat, Haapaniementie 16, 70100 Kuopio, Finland; tel: +358 17 288 4422; fax: +358 17 288 4488; email: puijo.symposium@uku.fi

12th International Biochemistry of Exercise Conference

13-16 July, Maastricht, the Netherlands

Further details: Marllen van Baak; email: m.vanbaak@hb.unimaas.nl; website: www.biochemex.org/IBEC

The Fifth International Conference on Sport, Leisure and Ergonomics

19-21 November 2003, Burton, Cheshire, UK
A three day conference in affiliation with the Ergonomics Society.

Further details: Congress Secretariat, Sport, Leisure and Ergonomics, Research Institute for Sport and Exercise Sciences, Liverpool John Moores University, Henry Cotton Campus, 15-21 Webster Street, Liverpool L3 2ET, UK; tel: +44 (0)151 231 4088; email: K.George@livjm.ac.uk

NOTES AND NEWS

Intercollegiate Academic Board of Sport and Exercise Medicine

Professor Donald Macleod has completed his four year term as Chairman of the Intercollegiate Academic Board of Sport and Exercise Medicine. Professor Charles Galasko has been elected by the IABSEM Board to replace him. Professor Macleod has also been replaced as the representative of the Royal College of Surgeons of Edinburgh on IABSEM by Professor Angus Wallace.

Winners of the annual BASEM Prizes

Dr Eileen Mackie (Clopidogrel inhibits platelet activation and exercise induced ischaemia in stable coronary artery disease) and Mrs Eleanor Curry (Role of exercise in multiple sclerosis) (joint winners).

The poster prize was won by Dr Stuart Reid (Injury patterns and injury prevention strategies in the winter sports population attending the English medical centre in Val D'Isere).

Diploma in Sport and Exercise Medicine for Great Britain and Ireland

Details for the above exam can be found on the Royal College of Surgeons of Edinburgh Website at <http://www.rcsed.ac.uk> alternative applicants can write to: The Royal College of Surgeons of Edinburgh, Eligibilities Section, Careers Information Services, 3 Hill Place, Edinburgh; tel: +44 (0)131 668 9222 or Mrs Yvonne Gilbert, Intercollegiate Academic Board for Sport and Exercise Medicine, Royal College of Surgeons of Edinburgh, Nicolson Street, Edinburgh EH8 9DW; tel: +44 (0)131 527 3409; email: y.gilbert@rcsed.ac.uk

Intercollegiate Academic Board of Sport and Exercise Medicine Diploma Exam

The following were successful diplomates in the Intercollegiate Academic Board of Sport and Exercise Medicine Diploma Exam, the two exams held in 2001 and 2002:

Dr Andrew I Adair
Dr Abimola Afolabi
Dr Sinead M Armstrong
Dr Terence J R Babwah
Dr Catriona E L Boyle
Dr Susan J Brick
Dr Lawrence J Conway
Dr Alan J Dawson
Mr Patrick D Dissmann
Dr Niall WA Elliott
Dr Christopher J Ellis
Dr Roger K Goulds
Dr Niall A Hogan
Dr James R Hopkinson
Mr Ananta K Jayanti
Dr Michelle Jeffrey
Mr S P Kale
Dr Arun Kumar
Dr Robert M MacFarlane
Dr Kaushal C Malhan
Dr Martin D McConaghy
Dr Lisa A McConnell
Dr Fergal T E McCourt
Dr Ronan M McKeown
Dr Michael G McMullan
Dr Steven R McNally
Dr Paul J Moroney
Dr Leonard D M Nokes
Dr Nanda K G Pillai
Dr Jonathan D Rees
Dr Duncal A Reid
Dr Cristyn C G Rhys-Dillon
Dr Martin O Rochford
Dr Hungerford A T Rowley
Dr Shaun A Sexton
Dr Jason E Smith