CASE REPORT

Rydeard, RA (2000). *Trainingstherapie nach dem Konzept der Biokinetik Exercise Technique in der Rehabilitation eines Elite – Triathletens,* Physiotherapie, Nr. 4 and 5.

AN EXERCISE REHABILITATION APPROACH;
EFFECT ON PELVIC INSTABILITY IN AN ELITE TRIATHLETE:
CASE REPORT

OBJECTIVE: The purpose of this report is to present an unusual case which examines the rehabilitation of dynamic stabilisation strategies about the pelvis in the presence of radiological and clinical instability at the symphysis pubis. There are no cases in the literature to date describing the influence of exercise rehabilitation on pelvic instability and the subsequent ability of the pelvis to sustain the high forces and speeds demanded in athletic training and competition.
METHOD: : A 31 year old elite male triathlete presented with marked instability, pain and functional disability as a result of viral damage to the fibrocartilagenous disc and the ligaments of the symphysis pubis. Exercise rehabilitation followed the principles of a modification of the "Pilates Method" (Biokinetik Exercise Technique, B.E.T. Pilates). The emphasis of training is on spinal and pelvic stabilisation and alignment, and on the recruitment of balanced, coordinated neuromuscular movement patterns about a stable lumbopelvic base. Exercise training utilising specialised ('Pilates') apparatus attempts to reeducate neuromuscular control strategies under conditions of loading and functional movement performance.
RESULTS: Contrary to clinical expectations, the patient responded well and returned to high level triathlon training and competition avoiding surgical internal fixation.
DISCUSSION: This case report describes an unique approach to resisted muscle and movement training following the principles of neuromuscular control. The ability to actively stabilise the pelvis against the forces of loading and movement may be important in preventing abnormal stress to inert tissue during the healing process. Further, training balanced, coordinated movement patterns may improve biomechanical efficiency and sport technique thereby enhancing dynamic stability at the pelvic girdle.
CONCLUSION: Targeted exercise training approaches such as Pilates based approaches may serve as a valuable adjunct in the treatment of lumbopelvic instabilities. The results of intervention in this case suggest it may be possible to train active stabilisation strategies in the lumbopelvic area in the presence of clinical and radiological instability at the pubic symphysis.