

Treating top athletes with shock waves

The use of medications can be considerably reduced

Sabine Arentz of the Sportmedizinisches Institut Frankfurt e.V. [Sports Medicine Institute] was responsible for medical care for the German national team at the world trampoline championship in 2007 in Canada. Muscular pains and tendopathies, sometimes chronic in nature, are typical for this sport, where the extremities and the back are generally under great stress. In addition to the usual sports medicine and physiotherapeutic measures, the Masterpuls MP50 radial shock wave device (RSWT) from Storz Medical AG was used successfully on seven of the 13 athletes. RSWT treatments were performed as follows: Athlete with irritation of the iliotibial tract – first treatment on the evening before the first competition, with an energy of 1.6 bar, the second treatment (two days later) on the evening before the finals, 1.8 bar, each time with 2500 shocks. An athlete with pains in the right iliotibial tract, status post comminuted patellar fracture two years prior, was treated each evening before competition with 2500 pulses and 1.8 bar. On another athlete with myogeloses on both sides paravertebrally, pains in the back extensors first appeared during competition. Before each competition, he was treated with 2,000 pulses at 1.6 bar or with 3,000 pulses at 2.6 bar. An athlete with a torn right shoulder capsule was treated one time with 2,000 shocks and 1.6 bar. An athlete complained of early tendopathy of the left pes anserinus. She was treated one time with 2,500 pulses at 1.4 bar. Another gymnast with a pain-free Baker's cyst on the right of unknown origin complained of a feeling of tension in the right knee cavity and of deterioration of extension. Before the competition, she was treated twice, each time with 2,500 pulses and 1.8 bar. An athlete with known irritation of the iliolumbar ligaments was treated three times in the evening before a match, each time with 3,000 shocks and 2.6 or 2.8 bar. Overall, a positive effect of RSWT and a high acceptance rate among athletes could be documented. For all the athletes, an improvement in the pain condition appeared in a very short time in the VAS [visual analogue scale]. The analgesic effect was noted in particular directly after the treatment, and the athletes' confidence in the therapy thus significantly increased. With an adequate (low) dose of RSWT, there is no haematoma formation, which would mean a restriction for the athlete. Worsening of pain, undesirable side effects, and cases of intolerance did not appear. The Masterpuls MP 50 portable radial shock wave device from Storz Medical AG, weighing only 9 kilos, offers a high measure of flexibility due to its compact construction; it takes up little space during travel. RSWT has established itself in high-performance sports as a very modern, well suited supplementary treatment method, good in every case. It is very safe and has great therapeutic effect in the care of top athletes in the competitive arena, such as now at the table tennis championships in China. An invaluable advantage of RSWT is that it avoids any problem of drugs and doping. The use of medications can be considerably reduced. It has become an indispensable part of medical care in competitive sports in high performance athletic events.

*Author: Sabine Arentz
Sportmedizinisches Institut Frankfurt am Main e.V
Source: Orthopädische Nachrichten 03/2008*