

Treating Sports Injuries – A Functional Approach

*Understanding sports and sports medicine:
not as simple as you might think!*

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In the extremely demanding world of top-level sports, every little detail matters. That's why the team approach is so widely used in professional sports. In their search for perfection, athletes and coaches will consult not only the team's physician or physical therapist but also specialists in nutrition, psychology, sports physiology, and other related fields.

A sports physician's job is full of responsibility. Appropriate first aid and correct diagnosis significantly determine the gravity and duration of an injury.



Treatment strategies for top athletes are very complex. The main emphasis is on the immune system (or neuroimmunoendocrinology, to use the modern term) rather than on the injured area, which simply reflects the state of the body in general. Also, professional athletes are not alone in suffering from injuries and other sports-related problems. There are millions of amateur or recreational athletes, and thousands of them deal with injuries ranging from minor bruises to major trauma, overexertion, etc. Established and aspiring experts in the field of sports medicine must be prepared to meet the needs and expectations of very specific and very different groups of individuals. When dealing with athletes, the medical profession must confront multiple issues simultaneously. Not only can sports injuries and related pathologies cause permanent health problems, they may also have serious professional and financial consequences. Immediate first aid and correct diagnosis often determine the gravity and duration of the injury. People who are active in sports are often also very active in their social and business lives. In these cases, the physician's situation becomes tricky due to a number of factors:

1. Such individuals have no time for full treatment. There is no place for the treatment strategy known in the medical profession as *ex juvantibus* – meaning that what works tells you what's wrong. Especially during the competition season, there is no time for second attempts. If your initial treatment fails, these patients will never approach you again.
 2. Sensitivity to aggressive medication. The need for aggressive treatment strategy increases the possibility of iatrogenic disease.
 3. In addition to their acute symptoms, these patients often present with muscular imbalances, micro-injuries, and problems that have already become chronic.
 4. The psychological factor: Will I be able to continue to play or compete?
 5. Altered movement patterns due to injury affect performance.
 6. Most importantly, the doctor or other medical professional must have a full and compassionate understanding of what sports mean to those involved.
- These factors put considerable pressure on the medical practitioner. In addition, while “soft” techniques – body-friendly methods and medications – are important, any intervention must produce rapid, reliable results.

Homotoxicology in sports medicine: why and how?

For the physician or other professional in the field, biological medicine offers unique approaches and treatment modalities. The possibilities include:

- Drainage therapy
- Stimulation of enzymatic systems
- Treating acute and chronic injuries
- Immunomodulation in cases of immunodeficiency
- Treating viral infections

Safety is the main feature of biological approaches, along with the possibility of combining different techniques. Antihomotoxic medicine is a regulatory therapy. In addition to syndromes related to overextension and overtraining, sports physicians frequently see cases of dysbiosis. Biological medicine in general and homotoxicology in particular are very effective in such cases. Another factor to consider is tissue acidosis, which is very important in sports not only because of anaerobic activity but also because of unrestricted use of sports supplements, many of which have not been determined to be safe for long-term use. Even the common supplement glucosamine, for example, may cause allergic skin reactions or gastrointestinal disturbances and is not recommended for use during pregnancy.

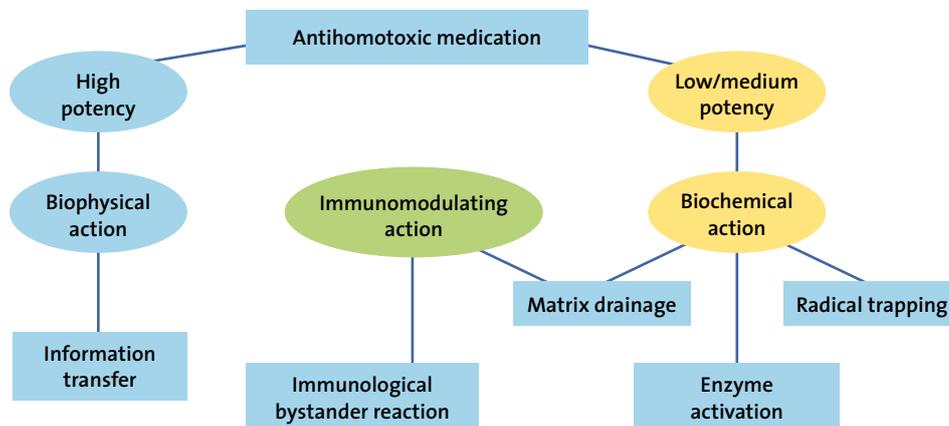


Fig. 1:
Modes of action
of biotherapeutic
medications

Clearly, biological approaches have distinct advantages. They can be highly effective yet minimally invasive. In my experience and opinion, both physicians and athletes come out ahead when the treatment stimulates natural, physiological healing reactions in the body. As I mentioned above, we need to be able to control what we are doing: Our treatment must be aggressive and have predictable positive effects and minimal or no side effects. Total suppression of the pain reaction is not our goal, however, because pain is the crucial factor in limiting aggressive movements. It is interesting to note that specific types of homotoxicological medications correlate with levels of intervention:

- Catalysts act on the cellular level.
- Suis-organ preparations work on individual organs.
- Combination medications work throughout the body.

For maximum effectiveness of course, understanding Reckeweg's philosophy of antihomotoxic medicine and the Disease Evolution Table as the basis of treatment is of paramount importance, but these topics are beyond the scope of this article. See Figure 1 for a simplified diagram of the modes of action of biotherapeutics.

Clearly, the mechanism of action is modulated by the immune system, so understanding the immunological bystander reaction will be helpful, as will a general knowledge of matrix physiology and pathophysiology.

Treatment strategies for sports injuries

First of all, I would like to emphasize that therapy for acute injuries is relatively straightforward. The well-known RICE acronym applies, along with other treatment techniques. It is important to follow the general principles of diagnosis, treatment, and re-evaluation. It is important to remember that inflammation means healing. If we analyze the phases of inflammatory response (acute, repair, maturation), it becomes obvious that inflammation needs to be controlled but not entirely suppressed. During treatment, we are also dealing with reflex actions of the nervous system, since any nociceptive stimulus will cause the nervous system to react. Again, it is important to permit adequate response. Thus indiscriminate use of drugs that suppress inflammation (NSAIDs, steroids) may produce direct as well as remote side effects. From the point of view of antihomotoxic medicine, the product of choice here is Traumeel. Figure 2 shows its (simplified) mode of ac-

tion. Traumeel is a very complex product, and all of its ingredients act synergistically on inflammatory responses:

- Aconitum napellus, Hamamelis virginiana, Millefolium, Bellis perennis, Belladonna, Arnica montana: stabilise vascular permeability, prevent venous stasis
- Aconitum napellus, Arnica montana, Chamomilla, Hypericum perforatum: analgesic effects
- Echinacea purpurea and angustifolia, Hepar sulfuris: antipurpurative effects
- Calendula officinalis, Arnica montana, Symphytum officinale, Echinacea purpurea: promote healing and callus formation

In acute injuries, Traumeel is best combined with Spascupreel (for muscle strains) and Lymphomyosot (for tissue swelling).

In an attempt to show that they are open-minded, some doctors add Traumeel to an injection cocktail of anti-inflammatory steroids. Figure 2 makes it clear that there is no advantage to such an approach because the steroid drug blocks all the inflammatory reaction pathways. Furthermore, the side effects of corticosteroids on connective tissue are well-known and have been thoroughly described, so their use in treating sporting injuries is becoming very controversial.

Example

Infiltration of 2 ampoules of Traumeel and 3 ampoules of Lymphomyosot in the area of the lig. talofibulare anterius after acute ankle sprain in a basketball player; needles 27G-3/4 inch. Dramatic improvement in walking ability was evident the next day.



Traumeel is an Inflammation-Regulating Drug (IRD)

When dealing with sports injuries, it is advisable to monitor other factors that contribute to successful performance: sound nutrition, wise use of supplementation (sometimes the scientific evidence does not confirm the theory), flexibility, and **sleep**, the main aid in recovery (the physiological peak in growth hormone occurs between 10pm and 1am). Before coming to a final diagnostic conclusion, it is important to stress that because the site of the injury is often not where the pain is, treating the painful location may not treat the injury. Careful functional evalu-

ation is needed. Moreover, there are usually no objective signs in such injuries, and making conclusive statements purely on the basis of instrumental data can be misleading. It is not uncommon to see “awful” changes on X-rays but no clinical symptoms or vice versa.

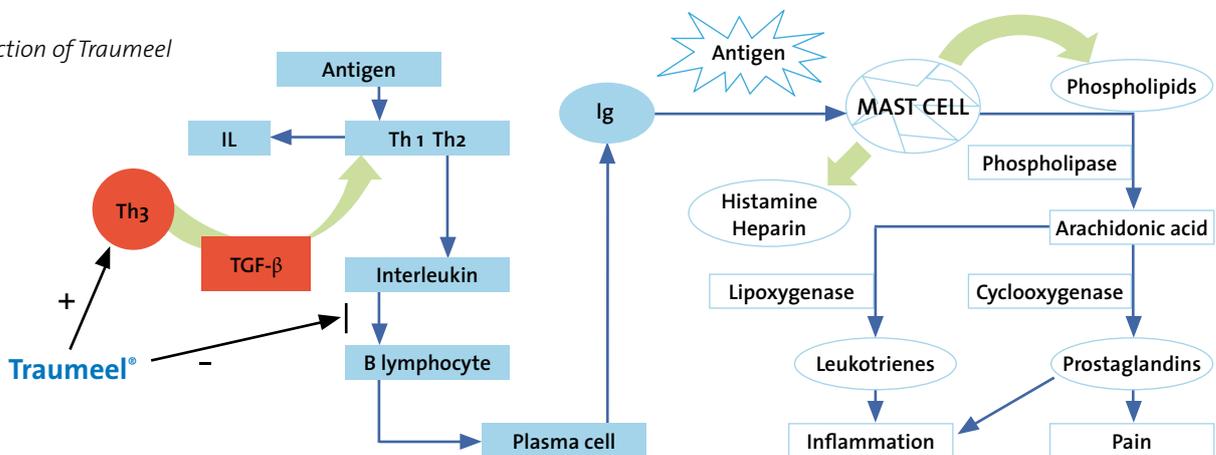
Before deciding on a course of treatment, therefore, the doctor needs to answer the following questions:

- Is this an instance of local or referred pain?
- Is the structure involved inert or contractile?
- Is the pattern capsular or non-capsular?
- What does palpation reveal?

Alternatively, diagnosis can be made on the basis of functional tests.

When dealing with micro-injuries and chronic problems in the musculoskeletal system, it is important to realize that any disturbance of function in a single motor segment will have repercussions and require compensation throughout the body. In other words, we will see chain reactions in the locomotor apparatus. Consequently, localized treatment is impossible or even nonsensical. The nervous system is what determines whether functional disturbance will manifest clinically. Neurological control has several aspects: It supports functioning by maintaining correct motor patterns and compensating for disturbed function. On the other hand, a chronic nociceptive stimulus may disrupt normal

Fig. 2:
Mode of action of Traumeel





Relaxation and sleep are important factors in the healing process.

function and cause pathological motor patterns to become fixed. Therefore, we see more musculoskeletal problems in psychologically labile athletes. The main changes may be grouped into three categories:

- Changes in stereotyped movements
- Upper and lower cross syndromes
- Myofascial trigger points

With regard to injecting trigger points, it is always important to realize that there are both silent trigger points (usually the main ones, at the core of the problem) and active (usually satellite) ones. Therefore, the use of this technique requires skillful palpation and the ability to incorporate muscular chain reactions and interrelationships into the clinical picture. (In treating problems of the biceps, for example, it may be necessary to inject the peroneus tertius.) The products of choice here are Traumeel and Spascupreel. For very persistent problems, Coenzyme compositum is helpful because it stimulates aerobic tissue metabolism. For long-term results, prophylactic measures such as matrix detoxification (the most familiar prescriptions for this purpose are Detox-Kit, Thyreoidea compositum, and Galium-Heel) and corrective exercises are essential.

Conclusion

For sports physicians, antihomotoxic medicine offers a very safe and yet very powerful approach to the human body, permitting treatment strategies that are simultaneously gentle and aggressive. From the perspective of functional medicine, predictability of any intervention is a paramount requirement. In conclusion, I would like to stress a few points:

- Not all techniques from professional body building are suitable for health-club clients. This is a major problem in modern fitness. Being able to control your body and its movements is important; mountains of muscle are not.
- Don't disregard the genetic factor.
- Use food supplements intelligently.
- Be prepared for intensive training.
- The main factors in fitness are the brain, the will, and knowledge.
- Do not compare yourself with others. ■

Further reading:

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