

A Biotherapeutic Approach to Common Sports Injuries

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1 Anterior Knee Pain Syndrome

This syndrome includes a number of conditions that can cause aches and pains related to the kneecap (patello-femoral pain syndrome). These conditions are common among athletes, especially runners (probably because running is the most frequent form of exercise for the majority of people). Over 40% of injuries related to running involve the knee, and for this reason the syndrome is sometimes referred to as “runner’s knee.”

Clinical manifestations include **pain** and sometimes **swelling**, especially during running and especially on the under-surface of the kneecap. Fluid may accumulate, causing swelling of the knee. If the kneecap is out of alignment, any vigorous activity can cause excessive stress with wear and tear on both the cartilage of the patella and the underlying bone, along with irritation of the joint lining. At first only downhill running is painful, but later all running and eventually even other leg movements, like walking down steps, will cause pain. Ultimately, pain is present even at rest.

Diagnosis:

Medical history, physical examination, and diagnostic tests (X-ray, CT, MRI, or blood tests) may be necessary to make a final diagnosis.

Treatment

(biotherapeutic approach):

- RICE (Rest – Ice – Compression – Elevation)
- Biotherapeutics (please refer to the Table of “Suggested biotherapeutic medications”)

2 Epicondylitis

(lateral epicondylitis or *tennis elbow*; medial epicondylitis or *golfer’s elbow*)

Epicondylitis is a painful inflammatory condition of the muscles and tendons of the forearm that attach to the elbow (epicondyle). It is termed **lateral epicondylitis** (*tennis elbow*) if it involves the lateral muscles/tendons (extensors) and **medial epicondylitis** (*golfer’s elbow*) if the inflammation involves the flexor muscles and their tendons.

Etiopathogenesis: In epicondylitis, inflammation of the extensor or flexor muscle/tendon is secondary to overuse or overstretching from athletic or professional activities that require repetitive, forceful forearm supination and/or pronation of the muscles and tendons that originate at the epicondyle.

In time, if the situation is not corrected, the condition will result in sub-periosteal hemorrhages, calcifications, spur formation, and – ultimately – tendon degeneration.

Treatment

(biotherapeutic approach):

see Table of “Suggested biotherapeutic medications”



More than 40 percent of injuries related to running involve the knee joint.



The shoulder is a very complicated joint, and the treatment of shoulder injuries is equally complex.

3 Common Shoulder Injuries

Because the shoulder has the greatest range of motion of any joint in the body, it must balance strength, flexibility, and stability. This balance can be maintained through exercises aimed at stretching and strengthening the supporting structures to avoid pain and injuries during specific activities. Problems are generally due to overuse, which loosens the rotator cuff – the group of muscles and ligaments/tendons that surround the shoulder joint. About 20% of sports injuries involve the shoulder.

Many sports entail the risk of injuries to the structures forming the pectoral girdle (the three shoulder bones – clavicle, scapula, and humerus – along with their respective supporting ligaments and tendons). Shoulder injuries include **rotator cuff injuries, subluxation/dislocation, acromion-clavicular separation, clavicle fractures**, etc.

Diagnosis: Proper medical evaluation must be performed by qualified health care professionals, with referrals if necessary.

Treatment

(biotherapeutic approach):

- RICE
- Adjunct biotherapeutics (see Table of “Suggested biotherapeutic medications”)
- Surgical repair may be necessary

| | Anterior Knee Pain Syndrome | Epicondylitis | Shoulder Injuries |
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| Primary tissues Involved tissues | Cartilage Synovial lining | Tendons | Ligaments Tendons/muscles |
| Biotherapeutic medications Choose from drops, tablets, ointments, or injection solutions according to clinical conditions & patient compliance. (More than one form may be used if available – e.g., Traumeel may be administered both topically and via biopuncture.) | Traumeel + Zeel + Cartilago suis-Injeel | Traumeel + Coenzyme compositum + Kalmia compositum + Ferrum- Homaccord + For chronic conditions with scar formation, add: Graphites- Homaccord | Traumeel + Kalmia compositum + Ferrum- Homaccord + Lymphomyosot + In cases of chronic weakness of connective tissue, add: Silicea-Injeel or Thyreoidea compositum |

Table: Suggested biotherapeutic medications