

**09:00 - 10:30 SP1 - Physiotherapists Symposia**

Hall D

Moderators: **Y. Front**, Israel  
**A. Reshef**, Israel

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09:00 **Physical Activity in Orthopedic Conditions**

Nirit Rotem

*University of Haifa, Haifa*

09:30 **Shoulder Replacement –Indications, Operative Procedure and Post Operative Management**

Gil Laufer

*Hillel Yaffe Medical Center, Hadera*

10:00 **Hypermobility Syndrome**

Noga Gal

*Assaf Harofeh Medical Center, Zerifin*

## **Shoulder Replacement –Indications, Operative Procedure and Post Operative Management**

G. Laufer

*Shoulder Service, Hillel Yaffe Medical Center, Hadera*

Shoulder replacement is one of the most demanding procedures performed in the shoulder. The different types of operations include: hemiarthroplasty for trauma and elective morbidity, resurfacing procedure that leaves maximal bone stock, and mimic the original anatomy, total shoulder replacement that reconstructs the original anatomy of the shoulder, and reversed shoulder replacement, that changes the shoulder kinematics by medializing the center of rotation, thus increasing the force of the deltoid, and allows patients with cuff atrophy a chance for near normal shoulder activity. These procedures are performed as a rule using the deltopectoral, or deltoid split approaches.

All the above operations share same general complications as wound infection, nerve injury and vascular injury. Each procedure has its unique potential complication as: mal position of the prosthesis, absorption of the tuberosity, dislocation etc.

There are post operative physiotherapy protocols for each type of surgery. We will discuss the common and the difference between them.

## Hypermobility Syndrome

N. Gal

*Assaf Harofeh Medical Center, Zerifin*

Joint hypermobility is the ability to perform movement in a larger than normal range of motion. It is measured by the Beighton scale that includes range of motion measurements with a maximum grade of 9 points.

Hypermobility syndrome is defined as excessive movement accompanied by musculoskeletal symptoms and the absence of any known rheumatological syndrome. The frequency in the population is 0.6% - 31.5% (1.1 –5.5 women to men). It includes symptoms of the musculoskeletal system, the internal systems and affective symptoms.

The affect on the musculoskeletal system includes a greater tendency to injury, tendon inflammation, instability, osteoarthritis, patellofemoral injuries, scoliosis, fibromyalgia, nerve pressure syndromes, mandibular joint problems and osteoporosis. The damage is caused by structural changes in the collagen fiber that leads to increased passive mobility and damage to the supporting structures that leads to proprioceptive deficits. This causes decreased neuromuscular control.

The internal system signs include hernia, asthma, mitral valve collapse, urinary leakage and anal insufficiency.

Among the affective symptoms that are noted the following can be present: depression, chronic fatigue syndrome, anxiety and sleep disturbances.

Pathophysiology: An anomaly in the relationship among the kinds of collagen with an increase in collagen type 3 in relation to collagen type 1 (28%: 46% as compared to 18%: 21% in the healthy population.)

The diagnosis is determined by the Brighton criteria (1998), that defined the major criteria (Beighton score  $\geq 4$ , arthralgia for three or more months in four or more joints) and secondary criteria (score of less than 4/9, arthralgia in one to three joints or low back pain, dislocations or subluxations, soft tissue damage, Morfan characteristics, ocular symptoms, dermatological symptoms, hernia, orifice collapse and valve collapse. One of the following is required for the diagnosis to be given: 2 major criteria, one major and two secondary criteria, four secondary criteria or two secondary criteria and one immediate relative with the syndrome.

Treatment: The treatment includes instruction, joint protection (corsets, taping), life style adjustments, cognitive behavioral therapy (CBT), medication and exercise.

The treatment regime emphasizes the development of neuromuscular control and stability and proprioceptive exercises that have been shown to contribute to the reduction of pain and the improvement of function.

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