Complex regional pain syndrome (CRPS), also called reflex sympathetic dystrophy syndrome, is a chronic pain condition as a result of dysfunction in the central or peripheral nervous systems. Its occurrences after hip replacement surgery is very rare however it has been estimated that 20% of patients with total knee arthroplasty will report pain following the procedure. CRPS can occur at any age, with average age for symptoms start is around 40; three out of four cases are women.

Symptoms of CRPS include “burning” pain, swelling and stiffness in affected joints, motor disability, with decreased ability to move the affected body part, changes in nail and hair growth patterns, changes in skin temperature, skin color changes, sometimes with excessively sweaty.

Diagnosis of CRPS is mainly by clinical signs and symptoms with reference to International Association for the Study of Pain Budafest diagnostic criteria.

The cause of CRPS is unclear but it appears to link to the abnormal neural response to injury. The treatment of CRPS should be by the multidisciplinary approach, usually involves a combination of physical treatment methods and medication to manage the pain. These include physiotherapy, non-steroidal anti-inflammatory drugs (NSAIDs), antineuropathics such as Gabapentin or Pregabalin and psychotherapy. Certain cases may be benefited from sympathetic blocks. The sooner the treatment is started after symptoms appear, the more effective it will be.

The risk factors to the development of CRPS and the prevention measures of CRPS will also be discussed.

References:
2. Scott S. Reuben Preventing the Development of Complex Regional Pain Syndrome after Surgery Anesthesiology, V 101, No 5, Nov 2004
5. The Unhappy Total Knee Replacement Chapter 34 – 37 pg 417-470