



Orthopedic surgery

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Orthopaedic surgery or orthopaedics, is that the branch of surgery concerned with conditions involving the system. Orthopaedic surgeons use both surgical and nonsurgical means to treat musculoskeletal trauma, spine diseases, sports injuries, degenerative diseases, infections, tumors. Jean-André Venel established the primary orthopedic institute in 1780, which was the primary hospital dedicated to the treatment of children's skeletal deformities. He developed the club-foot shoe for youngsters born with foot deformities and various methods to treat curvature of the spine.

Advances made in surgical technique during the 18th century, like John Hunter's research on tendon healing and Percival Pott's work on spinal deformity steadily increased the range of latest methods available for effective treatment. Antonius Mathijssen, a Dutch military surgeon, invented the plaster of Paris cast in 1851. Until the 1890s, though, orthopedics was still a study limited to the correction of deformity in children.

One of the primary surgical procedures developed was percutaneous tenotomy. This involved cutting a tendon, originally the Achilles tendon, to assist treat deformities alongside bracing and exercises. In the late 1800s and first decades of the 1900s, significant controversy arose about whether orthopedics should include surgical procedures in the least.

The use of arthroscopic techniques has been particularly important for injured patients. Arthroscopy was pioneered within the first 1950s by Dr. Masaki Watanabe of Japan to perform minimally invasive cartilage surgery and reconstructions of torn ligaments. Arthroscopy allows patients to get over the surgery during a matter of days, instead of the weeks to months required by conventional, "open" surgery; it's a really popular technique. Knee arthroscopy is one of the most common operations performed by orthopedic surgeons today, and is often combined with meniscectomy or chondroplasty. The majority of upper-extremity outpatient orthopedic procedures are

Arthroplasty is an orthopedic surgery where the articular surface of a musculoskeletal joint is replaced, remodeled, or realigned by osteotomy or another procedure. It is an elective procedure that's done to alleviate pain and restore function to the joint after damage by arthritis (rheumasurgery) or another sort of trauma. As well because the standard total knee replacement surgery, the uni-compartmental knee replacement, during which just one weight-bearing surface of an arthritic knee is replaced, may be a popular alternative.

One of the most problems with joint replacements is wear of the bearing surfaces of components. This can cause damage to the encompassing bone and contribute to eventual failure of the implant. The use of other bearing surfaces has increased in recent years, particularly in younger patients, in an effort to enhance the wear and tear characteristics of joint replacement components. These include ceramics and all-metal implants (as against the first metal-on-plastic). The plastic chosen is typically ultra-high-molecular-weight polyethylene, which may even be altered in ways in which may improve wear characteristics. Common methods of followed during orthopaedic surgery are

1. Knee arthroscopy and meniscectomy
2. Shoulder arthroscopy and decompression
3. Carpal tunnel release
4. Knee arthroscopy
5. Low back intervertebral disc surgery
6. Incise finger tendon sheath
7. Repair of ankle fracture (fibula)
8. Repair of femoral shaft fracture
9. Repair of trochanteric fracture

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