## English Lecture 11 "Elbow and its Disorders"

Feb. 4th (Sat) 8:40~9:40 Room 2 (Yamagata Terrsa 1F Terrsa Hall)

## English Lecture 11 (L11-1)



## The Elbow and its Disorders: my Experience and Perspective (also known as: The Elbow – the Joint we Love to Hate)

Bernard F. Morrey Mayo Clinic, University of Texas Health Science Center, USA

The elbow has fascinated me throughout my career – and still does. Knowledge of the capricious nature of the joint has earned it the well know designation of "predictable unpredictability " This characteristic extends both to its response to disease as well as to the uncertainty of many, if not most treatments. For these reasons I consider the elbow as the "joint between ( shoulder and hand) and beyond" (our understanding and effective treatment). Some of these features are explainable due to the unique anatomy from the skin to bone.

Skin. The elbow is a subcutaneous joint with little protection from skeletal muscle. Hence the tendency for poor skin healing and increased infection.

Neurovascular. Three major nerves are intimate to the joint and are at risk both with trauma and surgery. Vascular insult is associated with high risk of compartment syndrome.

Musculature, tendons. Trauma associated with highest risk of HO than any other joint. High incidence of refractory, anterior, posterior, medial and lateral tendinopathy.

Capsule, ligaments. Exaggerated healing reaction of the capsule causes high grade contracture and arthrofibrosis often disproportionate to the injury that responds poorly to PT. Both collateral ligaments are vulnerable to residual instability following injury.

Articulation. Arguably the most complex joint in the body. Trama to the articulation extremely common and extremely difficult to treat with traditional ORIF techniques. Prosthetic intervention for acute trauma is not yet optimized. Primary osteoarthritis is the only joint where OA is treated with debridement rather than replacement. Articular cartilage is preserved and the disease is manifest by osteophyte formation at the margin of the cartilage.

SUMMARY. The elbow anatomy is unique as is the response to insult. The legendary reputation of poor outcomes of intervention is changing, but there is a long way to go.

[Curriculum Vitae] -

Bernard F. Morrey, M.D., is the emeritus chair of Orthopedics and served on the Board of Governors of the Mayo Clinic. He is Professor of Orthopedics at Mayo and at the University of Texas, San Antonio. He is past President of the American Academy of Orthopaedic Surgeons, of the American Orthopaedic Association, and of the American Shoulder and Elbow Surgeons and . is past chair of the Board of Trustees of the JBJS Dr. Morrey is a Fulbright Scholar, He is a member of numerous specialty and international societies including the Royal College of Surgeons, Edinbourgh and EFFORT. Dr. Morrey's clinical interest is adult reconstructive surgery, and he was the surgeon to Senior President and Mrs Bush. Academic contributions include 25 years of NIH supported research. He holds nine patents and has authored 15 major textbooks under four different titles and in six languages. He has over 450 peerreviewed publications. He has been named a distinguished alumnus from St. Bernard College, the Mayo Clinic, the University of Texas Medical Branch, Galveston.

.A NASA aerospace engineer , 1965-67, he received an MD degree from the University of Texas Medical Branch in1971 and an MS in biomechanics from the U of Minnesota while completing orthopaedic training at Mayo Clinic. After two years in the Air Force, he was awarded the Meritorious Service Award, and joined the Mayo staff in 1978. His wife, Carla, an RN, and he have four children, all in the medical profession, and 12 grandchildren.