# 주관절 강직의 수술적 치료

이석범 정형외과 관절클리닉

## 이석범

# Post-traumatic Elbow Stiffness

#### INCIDENCE

- 5% of all elbow injuries results in ankylosis
- Fractures~10%
- Dislocation~20 %
- Fracture & Dislocation~40 %
- Condylar fractures~12 % of total incidence
- Stiffness related to length of immobilization & ill-informed intervention

#### Post-traumatic Elbow Stiffness

## Pathology

Intra-articular: Articular Adhesion

Articular Deformity

Extra-articular: Post & Ant Capsule

Osseous Bridge

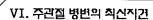
# The Stiff Elbow (Common Pathology)

- Caps contracture almost always present
- Intrinsic causes usually have extrinsic contractures as well
- Altered structural & biomech. properties
- Greatly reduced joint capacity (20 ml  $\rightarrow$  5 ml)

## STIFF ELBOW

#### Indications for Surgery

- Failed conservative treatment
- > 1 year duration of contracture
- Loss of extension > 30~450



직장: 김성제·이광원/연지: 이석범

- Flexion < 1200
- · Indications after individualized

Relationshir	of Maio	Sx to	Preferred Treatment

Dominant Symptom

Surgical Treatment

Loose body

Arthroscopy

Extension loss

Mild

Arthroscopy / Column

Moderate Flexion loss Column Column

Impingement pain
Ulnar nerve symptom

Ulnohumeral Arthroplasty Ulnohumeral Arthroplasty

Extensive motion loss Pain full arc; age > 60

Total Elbow Replacement Total Elbow Replacement

## THE STIFF ELBOW

"Always"-mixed

"Never"-just osseous

"Adhesions" Last to go: open

First to go: ascope

Beware: adhesions avulse cartilage

# Surgical Technique

# "COLUMN PROCEDURE"

#### Indications

- · Marked limitation of flexion and/or extension
- Extrinsic pathology: traumatic arthritis
- Anterior contracture &/or Posterior contracture

# "COLUMN" PROCEDURE

#### **TECHNIQUE**

- · Posterior or lateral incision
- · Modified Kocher lateral approach
- · Elevate muscles from supracondylar ridge

- Excision of capsule (front and back)
- · Limited procedure, isolated removal of impingement of little value

## **COLUMN PROCEDURE**

#### Advantages:

- Simple operative technique
- · Rapid post-op. recovery
- Early return of function
- No loss of stability
- Ability to approach both front and back

#### THE STIFF ELBOW

BEWARE of REBOUND:

LOSE: 15~20 deg, Post Op

#### Indication of UHA

- · Extensive humeral osteophyte
- Impingement pain
- Ulnar nerve symptom

# Traumatic Arthritis of the Elbow

- Limited Interest
  - No functional position
  - High complication
    - Sepsis
    - Non-union~10%
    - Humeral fx~15%

Ix: Sepsis, Young, High demand Traumatic Arthritis of the Elbow

- INDICATIONS
  - Non-septic
  - Less than 55yrs (+/-)
  - Gender: m\f