Reconstructive Procedure of Elbow Joint

-Semiconstrained Total Elbow Arthroplasty-

경희대 정형외과 이 용걸

```
arthroplasty - resection, functional, interposition, debridement,
              replacement
final goal - pain relief
            normal function (ADL)
            resonable stability
final outcome - instability
               weakness
               reankylosis
arthrodesis - What is the functional position for the elbow joint ?
resection arthroplaty - only indicated at the uncontrollable infection
interpositional arthroplasty - young person
                                 post-traumatic arthritis
                                 the result of replacement arthroplasty is
                                 unpredictable
indication of replacement arthroplasty
               incapacitating pain
               loss of motion
choice of joint implant
           based on
                     .extend and etiology of disease process
                     .specific needs of the patient
                      .experience of the surgeon
           influenced by
                          . the degree of pain
                           .the amount of joint instability
                           the limitation of motion
total elbow replacement arthroplasty
     nonconstrained - capitellocondylar, London, Kudo, Hingeless, Souter, Pritchard
                     .young patient
                     .less activity level
                     .strong supracondylar column
                     .adequate ligament
                     .nontraumatic
                     .stage III rheumatoid arthritis
     semiconstrained - Mayo-Coonrad, Pritchard, Triaxial, Arizona
                     .old patient
```

.more activity level

- .weak supracondylar column
- .inadequate ligament
- .traumatic
- .late stage III rheumatoid arthritis

implant selection

- .degree of disease
- .bone stock
- .degree of instability
- .patient expectation

contraindication of replacement

- .infected joint
- .arthrodesis
- .paralysis of the biceps or triceps
- .severe joint contraction

surgical technique

exposure : posterolateral approach

identify the ulnar nerve

triceps reflected in continuity

ulnar preparation ; center of ulnar component

flattening of olecranon notch

making suture holes for firm apposition of the triceps

humeral preparation: visualization of both supracondylar column

shifting alignment stem slight laterally

implant insertion; assembly both component

SUMMARY

- .total elbow replacement arthroplasty : incremental improvement
- .semiconstrained device broadens the indications for joint replacement
- .avoidance of complications is achieved by carefully planning and meticulous technique