## 조기 류마티스 관절염의 약물치료

## Paradigm Shifting to Early Treatment of Rheumatoid Arthritis

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Min Chan Park, M.D. • Soo • Kon Lee, M.D.

Department of Internal Medicine

Yonsei University College of Medicine, Severance Hospital

E - mail : mcpark@yumc.yonsei.ac.kr · sookonlee@yumc.yonsei.ac.kr

## Abstract

he past decade has greatly enhanced our understanding of rheumatoid arthritis (RA). Not only have new drug therapies become available, but this period has witnessed dramatic changes in treatment strategies as well. Since 1989, when the proposal on reversing the pyramid approach (the stepdown bridge concept) was published, the concept of early and aggressive treatment of RA has become the leading paradigm. The theory underlying this approach is based on a better understanding of the devastating long term consequences of RA in most patients, and the logical tenet that irreversible damage must be prevented before it occurs. Evidence has shown the irreversible joint damage in RA occurs early in the disease, making a "wait and see" approach unacceptable. Thus, it appears logical to begin treatment as soon as a diagnosis of RA is confirmed, to slow disease progression by treatment with disease modifying antirheumatic drugs. This review will address the evidence supporting the benefit and the principles of early treatment, as well as the current update on pharmacological management in early RA.

Keywords: Rheumatoid arthritis; Early treatment;
Pharmacological management;
Disease modifying antirheumatic drug
: ; ; ;

가

가 70~80%

가

(1).

(nonsteroidal antiinflammatory

drugs, NSAIDs) 가

(bony erosion)

(disease modifying anti rheumatic drugs,

DMARDs) 가 (pyramid ap-

proach) 가

1989 Wilske Healey(2)

가

DMARDs	가
	(1, 4).
	가 (3 ), (metatar-
	sophalangeal joint) ,
	, C -
	가 , 가
	, 가 ,
(Early Rheumatoid Arthritis)	
	(5, 6).
1987	가
(American College of Rheumatology)	
	가
	2
	가
가	
9	
가 가	
(3).	
가	
	2 가
,	DMARDs
	DMARDs NSAIDs
	(7, 8). DMARDs 2
2 ,	2

가 50% 가 (9, 10). **DMARDs** (NSAIDs) **DMARDs** 1. 가 NSAID가 3~7 가 가 NSAIDs **NSAIDs** 가 가 **NSAIDs DMARDs** cyclooxygenase 2(Cox 2) 가 30% 가 **NSAIDs** 가 (11, 12) **NSAIDs** 2 (13). Cox 2 **DMARDs** 65 가 (glucocorticoids) **DMARDs NSAIDs** 가 가 가 가 가 2. (Glucocorticoids)

967

```
가
                                                                            가
                                                                             DMARD
                 가
                                             methotrexate(MTX), sulfasalazine(SSZ),
    DMARDs
                            가
                                             hydroxychlorquine(HCQ)
                                   (bridging
effect)
                                                       가
                                                             DMARD
                                                                        bucillamine
                                                                                   leflu-
                   가
                                             nomide가
                                                                                 DMARD
                                                                                      2
                           가
                                             가
                                                       DMARD
                       7.5 mg
                  (
        가
                                                                        MTX, SSZ
                           가
                                                                                   3
DMARDs
                                             leflunomide가
 (14).
                                                                     , HCQ bucillamine
        가
                               가
                                                                  3
                                                                           MTX HCQ가
                                             가
                                                                    SSZ bucillamine
                                                         (16, 17).
                                        (
                                               DMARDs
                                                                      MTX + SSZ, MTX +
                                             SSZ + HCQ, MTX + leflunomide
  5 mg
  50%
                                                                        (18, 19).
        3
                                        D
                                                         DMARDs
                                1
                                                 가
                      T sore가 - 1.0
                                                                MTX
                                                                       SSZ
     bisphosphonate
                      가
   (15).
                                             DMARD
                                                                       가
                                                        MTX
                                                                          SSZ, HCQ
              (DMARDs)
                                             leflunomide
 DMARDs
```

```
(Biologic Agents)
                                                leukin(IL) - 1
                                                                (recombinant human IL - 1
4.
                                                receptor)
                                                                anakinra
                                                                             В
                                                   (chimeric anti - CD20 monoclonal antibody)
                                                rituximab
                                                        가
(biologic response modifier)
                                                                         가
                                                                               (23, 24).
                                                                                   (stem cell
가
                              TNF - 가
                                                transplantation)
                                                                         가
                   가
                         TNF -
TNF -
                       (chimeric anti - TNF -
monoclonal G1 antibody)
                                                           (25).
                      infliximab(Remicade)
75 kD
           TNF
                           (soluble TNF recep-
tor: Fc fusion protein) etanercept(Enbrel)가
                                 TNF -
        TNF -
                                (fully human
                                                                      2
anti - TNF - monoclonal G4 antibody) adalimu-
                                                                                          가
mab(humira)
                                                            DMARDs
       TNF -
                          가
                      DMARDs
                                                                가
                                    MTX
                                                                                      가
                    가
                                                                               DMARDs
etanercept
                                                                 MTX SSZ
                              가
                                                                     DMARDs
DMARDs
(20 \sim 22).
                                                가
                                                           DMARDs
                                                       . 0
 TNF -
                                       inter-
```

969

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