

퇴행성 관절염의 약물치료

Pharmacological Therapy in Osteoarthritis

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Abstract

Osteoarthritis (OA) is a common, chronic, and painful disorder characterized by cartilage loss. It is the most common among all rheumatic disorders and is a major cause of disability. OA can be managed with a variety of pharmacological therapies, including acetaminophen, traditional nonsteroidal anti-inflammatory drugs, cyclooxygenase-2 inhibitors, intra-articular steroids, viscosupplements, glucosamine, chondroitin sulfate, and capsaicin. In this review, I describe the clinical efficacy and side effects of these pharmaceuticals and review disease-modifying osteoarthritis drugs (DMOAD), such as glucosamine, diacerein, and avocado/soybean unsaponifiables, of which the clinical efficacy still remains to be determined.

Keywords : Osteoarthritis; Acetaminophen;

Nonsteroidal anti-inflammatory drug;

Disease modifying osteoarthritis drug

; ; ; ;

(subchondral bone) 가 1 4 . 가

가

warfarin , -

(disease 가

modifying osteoarthritis drug, DMOAD) 1 .

Tramadol

NSAID

tramadol . tramadol

opioid agonist norepinephrine

serotonin .

(,

[insole]), 가

가

cyclooxygenase - 2 inhibitors(

COX - 2) NSAIDs

tramadol

가 ,

ibuprofen 가

. 1 200~

1. 300 mg 4 . ,

가 가 .

가 .

1)

(1) 가

NSAID

(nonsteroidal anti - inflammatory drug, (NSAIDs)

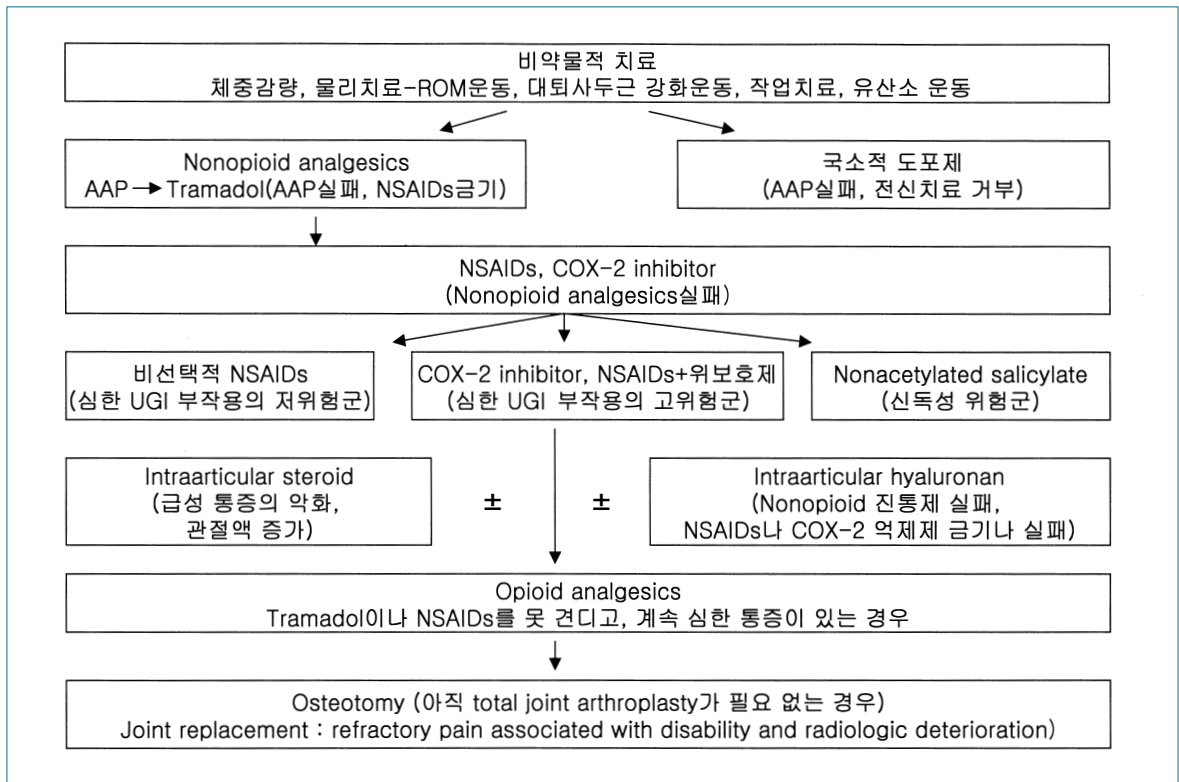
NSAID) 가 . , opioid

NSAIDs . NSAIDs COX -

2 specific inhibitor

COX - 2

,
 . 65
 20~30%가 NSAIDs
 . NSAIDs
 65 ,
 ,
 (가 2.0 mg/dl)
 가 65
 ,
 ,
 NSAIDs
 가
 .
 (, ,)
 COX - 2
 NSAIDs+
 COX - 2 celecoxib, rofecoxib
 . celecoxib naprox-
 en , rofecoxib diclofenac,
 ibuprofen (5).
 celecoxib refe-
 coxib NSAIDs
 가
 .
 misoprostol proton pump
 inhibitor(PPI)
 COX - 2
 가 NSAIDs
 COX - 2
 가 warfarin
 NSAIDs 가
 COX - 2
 , celecoxib sulfonamide
 COX - 2
 NSAIDs+
 NSAIDs
 가
 가
 가 NSAID
 .
 misoprostol 200 µg, 3~4
 가
 2 가
 . misoprostol omeprazole
 (20~40 mg/d) famotidine(40 mg bid)
 . famotidine
 omeprazole 20 mg/d 40 mg/d
 PPI
 .
 Nonacetylated salicylates(choline magnesium tri-
 salicylate salsalate)



1.

(ototoxicity) oxycodon(OxyContin) 가
1 20 mg oxycodon
NSAIDs (6 가가 opioid
가
NSAIDs NSAIDs
NSAIDs
(NSAID tramadol
1).
(2) Opioid analgesics opioid 가
Opioid (controlled clinical trials)
NSAIDs

가 , 가 2004 가 .

NSAIDs aspirin(81 ~ 325 mg/day) Diacerein interleukins(IL - 1) metalloproteinase . 507

가 , COX - 2 가 NSAIDs NSAIDs 가 (14). (15). (3) (DMOAD ; disease modifying osteoarthritis drug, SYSADOA ; symptomatic slow acting drugs for OA) (glucosamine, chondroitin, diacerein and hyaluronic acid, avocado/soybean unsaponifiable) Avocado/soybean unsaponifiable(ASU) 가

DMOAD 가 (17). Glucosamine, chondroitin sulfate, diacerein, avocado/soybean unsaponifiable(ASU) DMOAD NSAID diacerein , , 가 DMOAD

Glucosamine chondroitin prostaglandin 가 proteoglycan 가 Chondroitin sulfate leukocyte elastase 2) cytokine prostaglandin . 15 meta glucosamine chondroitin 가 glucosamine (1) 가 (16). NIH glucosamine , chondroitin sulfate , glucosamine/chondroitin sulfate , (80 ~ 90%) 가

4~6 . 3) (Methylsalicylate or capsaicin cream)

가 . 가

(2) Hyaluronic acid . Capsaicin(trans - 8 - methyl - n -
N - acetylglucosamine glucuronic vanillyl - 6 - nonenamide)
acid substance P가
, .
hyaluronic acid 가 capsaicin
substance P가
가
capsaicin
가
hyaluronic acid 가 3~4 가 3~4
hyaluronic acid
hyaluronic acid
proteoglycan arachi-
donate prostaglandin E₂
NSAIDs , COX - 2 가 ,
, 가 , 가
FDA
hyaluronic acid가
가 가
가 가
가
1 3~5 =

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