

# Osteoarthritis Pain: Rethinking the Safety Profile of NSAIDs

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## Abstract

Osteoarthritis (OA), a progressive joint disease, affects millions in India. Joint pain stands as the primary symptom of OA, prompting patients to seek medical assistance. Comorbidities such as hypertension and cardiovascular and renal diseases commonly coexist with OA, thereby influencing treatment choices. Diclofenac, a widely used non-steroidal anti-inflammatory drug, exhibits analgesic and anti-inflammatory properties by inhibiting both cyclooxygenase-1 (COX-1) and COX-2 inhibitors. In contrast, Etoricoxib is a selective COX-2 inhibitor approved for use in arthritic conditions, including OA. The comparative analysis of Diclofenac and Etoricoxib reveals potential cardiovascular risks associated with Etoricoxib, emphasizing the importance of cautious prescribing, particularly in patients with pre-existing cardiovascular conditions. In individuals with chronic kidney disease (CKD), Diclofenac manifests promising renal safety, establishing itself as a safer choice. This review aims to highlight the clinical efficacy of Diclofenac and compare its safety with that of Etoricoxib in treating OA patients with hypertension and CKD.

**Key words:** Diclofenac, Etoricoxib, Hypertension, Non-steroidal anti-inflammatory drugs, Osteoarthritis, Pain

## INTRODUCTION

Osteoarthritis (OA) is a progressive degenerative disease leading to the deterioration of joints.<sup>[1]</sup> OA is one of the most prevalent causes of pain and disability.<sup>[2]</sup> The number of individuals in India affected by OA increased from 23.46 million in 1990 to 62.35 million in 2019. This trend is expected to continue due to increasing life expectancy.<sup>[2,3]</sup> In addition, the simultaneous occurrence of OA and other comorbidities becomes more common, particularly in the later stages of life.<sup>[4]</sup>

This review aims to highlight the clinical efficacy of Diclofenac, a widely used non-steroidal anti-inflammatory drug (NSAID), with that of Etoricoxib in terms of safety in patients with OA along with comorbid conditions, such

as hypertension and chronic kidney disease (CKD), based on the expert opinion of 40 physicians.

## OA AND COMORBID CONDITIONS: INCREASING PREVALENCE NEEDS ATTENTION

OA stands out as one of the diseases exhibiting a high incidence of comorbidity, with individuals diagnosed with OA facing a notably elevated risk of developing comorbidities compared to those without OA. Common comorbidities associated with OA encompass hypertension, cardiovascular diseases, obesity, respiratory diseases, diabetes, peptic ulcer, and renal ailments.<sup>[5]</sup> Hypertension emerges as the predominant chronic condition among individuals with OA.<sup>[4]</sup> Moreover, there is an apparent upward trend in the prevalence of both OA and hypertension. Unfortunately, the medications frequently prescribed for OA tend to have adverse effects on blood pressure (BP) or may interfere with the effectiveness of antihypertensive treatments.<sup>[6]</sup> Consequently, the presence of comorbidities significantly influences treatment decisions, especially in the realm of pharmacologic therapy for OA.<sup>[7]</sup>

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## SAFETY OF NSAIDS IN OA: CHOOSING THE RIGHT NSAID IS CRITICAL

International and national guidelines universally advocate the use of oral NSAIDs for managing severe pain in OA patients.<sup>[8]</sup> NSAIDs, as a drug class, exhibit considerable heterogeneity, with significant variations in the risk of adverse events, particularly regarding gastrointestinal (GI) and CV complications. Consequently, the overall benefit-risk assessment of individual NSAIDs should be taken into consideration, and when appropriately prescribed, oral NSAIDs can offer a combination of effectiveness and safety in the treatment of OA.<sup>[9]</sup>

## PARACETAMOL, SERRATIOPEPTIDASE IN OA PAIN MANAGEMENT: REVIEWING THE SAFETY

To alleviate pain linked to OA, paracetamol and NSAIDs are frequently prescribed. However, a substantial meta-analysis reveals that paracetamol exhibits minimal impact on pain or functionality in OA patients, contrasting with the greater efficacy observed with Diclofenac, an NSAID.<sup>[10]</sup> Apart from its limited analgesic effectiveness, Paracetamol may pose various safety concerns, particularly in terms of GI and CV aspects, alongside its well-documented hepatotoxicity, especially at doses exceeding 3 g/day.<sup>[11]</sup>

Serratiopeptidase is also frequently prescribed in combination with NSAIDs. However, caution is advised, and it is strongly recommended that only NSAIDs should be prescribed for inflammatory conditions until the efficacy of drugs such as serratiopeptidase is substantiated through large-scale, double-blind, multi-centric, randomized, and controlled trials.<sup>[12]</sup> In addition, there are indications that serratiopeptidase may have adverse effects on both joint cartilage and synovial tissue.<sup>[13]</sup>

## DICLOFENAC OR ETORICOXIB: CHOOSING THE RIGHT NSAID IN OA WITH HYPERTENSION

Diclofenac has been found not to elevate the risk of hypertension.<sup>[14]</sup> In contrast, the European Medicines Agency advises against the use of Etoricoxib in individuals with hypertension whose BP consistently exceeds 140/90 mmHg and has not been effectively managed. Etoricoxib may be linked to a higher incidence and severe hypertension compared to certain other NSAIDs and selective cyclooxygenase-2 (COX-2) inhibitors, especially at elevated doses. Therefore, it is recommended to regulate hypertension before initiating Etoricoxib treatment, and

vigilant monitoring of BP is crucial throughout the course of Etoricoxib treatment.<sup>[15]</sup>

## INSIGHTS ON CV SAFETY OF DICLOFENAC VS. ETORICOXIB FROM THE MEDAL STUDY (34,701 PATIENTS)

Hypertension is considered an important risk factor for CV disease. In the MEDAL study conducted by Combe *et al.*, Etoricoxib caused maximum average change in systolic BP (SBP) ranging from 3.4 to 3.6 mmHg (with a diastolic BP [DBP] increase of 1.0–1.5 mmHg), whereas Diclofenac resulted in maximum average change in SBP ranging from 0.9 to 1.9 mmHg (with a DBP change of 0.0–0.5 mmHg). Compared to Diclofenac, Etoricoxib was associated with a significantly higher number of discontinuations due to hypertension-related adverse events.

In addition, Etoricoxib 90 mg showed a greater incidence of investigator-reported congestive heart failure (CHF) and discontinuations due to edema compared to Diclofenac. These results were consistent with the results obtained from the EDGE and EDGE II studies.

Therefore, it can be concluded that Etoricoxib exhibits a greater increase in BP and a higher risk of hypertension, CHF, and edema-related discontinuations compared to Diclofenac, emphasizing the need for cautious use in patients, particularly those with CV concerns.<sup>[16]</sup>

The study by Murtadha Al-Shehristani and Aziz emphasizes the need for caution while prescribing COX-2-selective NSAIDs such as Etoricoxib to hypertensive patients. The potential for increased BP, especially with selective NSAIDs compared to non-selective ones, underscores the importance of a careful and considered approach by physicians.<sup>[17]</sup> The findings of this study align with reports from the American Heart Association, which assert that higher levels of selectivity for COX-2 are linked to an increased risk of CV complications [Figure 1].<sup>[18]</sup>

## REVIEW OF NSAIDS IN CKD PATIENTS

Diclofenac has a short biological half-life of approximately 2 h and a rapid elimination rate, with a mean elimination half-life of 1.2–1.8 h. Diclofenac undergoes metabolism into glucuronide and sulfate conjugates, which are then excreted in urine and bile secretions. Only a small fraction of Diclofenac (approximately 1%) remains unaltered and excreted through the renal system. As renal excretion is not the principal route for Diclofenac elimination, concerns regarding renal burden are minimal. Consequently, standard

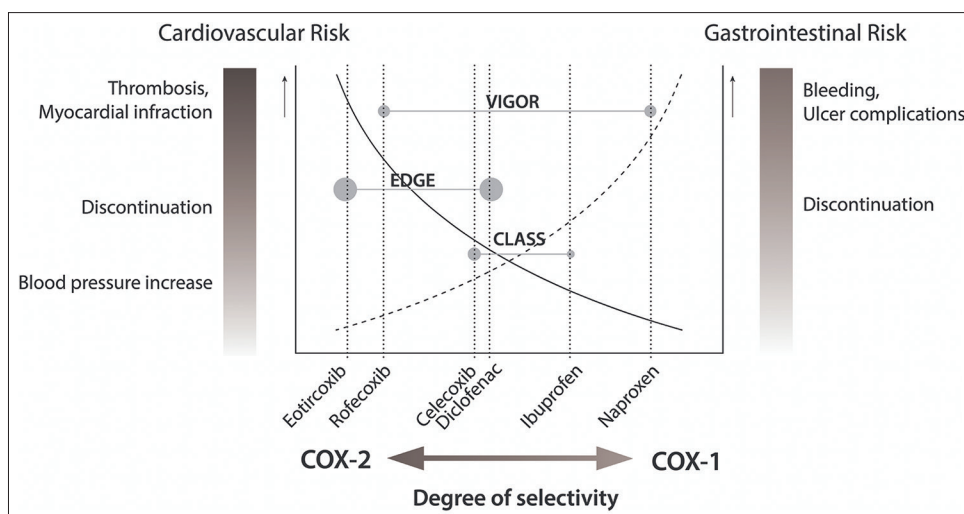


Figure 1: Impact of the relative degrees of selectivity of non-steroidal anti-inflammatory drugs

dosing of Diclofenac may be well tolerated in patients with renal dysfunction, provided there are no other contraindications.<sup>[19]</sup>

Diclofenac shows lesser renal excretion as compared to Etoricoxib [Table 1].

In a study conducted by Kaewput *et al.*, the impact of short- and long-term use of selective COX-2 (sCOX-2) inhibitors, specifically Etoricoxib, on renal function and electrolyte imbalance in patients with CKD was investigated. The findings indicated an elevated risk of rapid estimated glomerular filtration rate decline and hyperkalemia associated with sCOX-2 inhibitor use, both in the short term and over extended periods. The study suggests that patients with CKD using sCOX-2 inhibitors should undergo close monitoring, and prolonged exposure to these inhibitors should be avoided to mitigate potential adverse effects on renal function and electrolyte levels.<sup>[22]</sup>

## CONCLUSION

The comparison between Diclofenac and Etoricoxib accentuates Diclofenac's analgesic and anti-inflammatory properties without increasing hypertension risk. In contrast, Etoricoxib, a sCOX-2 inhibitor, poses a risk of hypertension. The MEDAL study also underscores Diclofenac's favorable CV profile compared to Etoricoxib, emphasizing the importance of tailored therapeutic decisions in managing OA in patients with CV risk. Studies also indicate potential adverse effects on renal function in patients with CKD using Etoricoxib. The gathered evidence supports Diclofenac as a preferred choice for the management of OA in patients with common

Table 1: Percentage of renal excretion of Diclofenac and Etoricoxib

NSAID	Renal excretion (%)
Diclofenac <sup>[20]</sup>	60
Etoricoxib <sup>[21]</sup>	70

NSAID: Non-steroidal anti-inflammatory drugs

comorbidities, forming a basis for seeking expert opinions from health-care professionals.

## Expert Opinion

### 1. Dr. Ravindra Pratap Singh

MS (Orthopaedics), Care Hospital, Bareilly, Uttar Pradesh

Diclofenac is a preferred choice for managing OA pain due to its effectiveness. In my clinical experience, I favor Diclofenac over Etoricoxib because of its lower incidence of adverse events, including hypertension. Concerns about Etoricoxib's higher risk of edema-related discontinuation and BP destabilization make Diclofenac preferable, especially for patients with renovascular disease or existing hypertension. In addition, Diclofenac is safe, particularly in patients with pre-existing heart failure risk factors. Given Diclofenac's observed rapid penetration of synovial fluid in individuals with OA, a significant number of patients, exceeding 90%, are most likely to experience relief in synovial inflammation after treatment. I would choose Diclofenac over Etoricoxib for faster relief, given its lower IC50 among NSAIDs, ensuring a quicker onset of action.

### 2. Dr. Tanveer Ali

MS Orthopaedic, GMC Anantnag, Anantnag, Jammu and Kashmir

In my clinical practice, I prefer Diclofenac over Etoricoxib for OA pain management due to its effectiveness, lower

incidence of hypertension, and lower rate of patient discontinuation. Diclofenac may be a preferable option for patients with renovascular disease. In addition, the higher risk of CHF with Etoricoxib, especially at a high dose, makes Diclofenac a judicious choice in patients with pre-existing heart failure risk factors. With a balanced efficacy and safety profile, Diclofenac, with its rapid synovial fluid penetration, provides relief in about 70–90% of patients with OA. In CKD patients, opting for Diclofenac is advisable. I would choose Diclofenac over Etoricoxib for patients requiring faster relief.

### 3. Dr. Hemant Bansal

MS Orthopaedic, Narayana Superspecialty Hospital, Gurugram, Haryana

In my clinical practice, I favor Diclofenac over Etoricoxib for pain management in OA due to its effectiveness, lower incidence of adverse events, and reduced risk of treatment discontinuation. Considering concerns about hypertension, edema, and CHF associated with Etoricoxib, Diclofenac, with its balanced efficacy and safety profile, emerges as a better option, especially in patients with pre-existing hypertension or renal impairment. Diclofenac, with its rapid synovial fluid penetration, provides relief in >90% of patients with OA. I would prefer Diclofenac over Etoricoxib in patients requiring faster relief due to its known lower IC50 among NSAIDs, leading to a quicker onset of action.

### 4. Dr. Krishan Kumar Dua

MS Ortho, Dua Hospital, Sonipat, Haryana

Diclofenac is a preferred choice for OA pain management due to its effectiveness as an oral, NSAID and analgesic. In my clinical experience, I favor Diclofenac over Etoricoxib due to its lower incidence of adverse events, including hypertension, and a lower rate of patient discontinuation. Diclofenac is a preferable option, particularly for patients with renovascular disease or existing hypertension. Considering the increased risk of CHF with a high dose of Etoricoxib, opting for Diclofenac is prudent, particularly in patients with pre-existing heart failure risk factors. With its balanced efficacy and safety profile from COX-1 and COX-2 inhibition, Diclofenac provides relief to over 90% of OA patients. Diclofenac with a shorter half-life is advisable over Etoricoxib in CKD patients. I would choose Diclofenac over Etoricoxib for patients needing faster relief due to its lower IC50 among NSAIDs, resulting in a quicker onset of action.

### 5. Dr. Karun Jain

Orthopaedic Surgeon, Shri Mahaveer Ortho Clinic and Pushpanjali Medical Centre, Delhi

Diclofenac is preferred in my clinical practice over Etoricoxib for the management of pain in OA because of its efficacy, lower frequency of side effects, and decreased chance of treatment cessation. With its well-balanced efficacy and safety profile, Diclofenac appears to be a better alternative to Etoricoxib when it comes to concerns about hypertension, edema, and CHF. This is especially true for individuals who already have hypertension or renal impairment. Diclofenac helps more than 90% of individuals with OA because of its quick absorption into the synovial fluid. Given that Diclofenac has a known lower IC50 than Etoricoxib among NSAIDs and so acts more quickly, I would rather use it for patients who need relief more quickly.

### 6. Dr. Alok Sharma

MS (Ortho), MCh (UK), Alokik Bone and Joint Clinic, Shastri Nagar, Ghaziabad, Uttar Pradesh

In my clinical experience, I favor Diclofenac over Etoricoxib for OA pain management due to its effectiveness, lower adverse event incidence (especially hypertension), and reduced patient discontinuation. Given Etoricoxib's higher risk of CHF, particularly at a high dose, Diclofenac is a prudent choice for those with heart failure risk factors. Opting for Diclofenac is advisable in CKD patients due to its lower risk of acute interstitial nephritis. Diclofenac, due to its rapid penetration of the synovial fluid, is effective against synovial inflammation in the majority of patients. I would choose Diclofenac over Etoricoxib for faster relief due to its lower IC50 among NSAIDs, ensuring a quicker onset of action.

### 7. Dr. Prasoon Kamra

MS Orthopaedic, Sarvesh Health city, Hisar, Haryana

I support the use of Diclofenac over Etoricoxib due to its lower incidence of adverse events, particularly hypertension, and reduced likelihood of patient discontinuation. Etoricoxib's higher risk of edema-related discontinuation and BP issues raises concerns, making Diclofenac preferable, especially for those with renovascular disease or existing hypertension. In addition, the elevated risk of CHF with a high dose of Etoricoxib makes choosing Diclofenac prudent, particularly for patients with pre-existing heart failure risk factors. With 70–90% of patients experiencing relief from synovial inflammation, Diclofenac is a preferred choice, offering faster relief with its lower IC50 among NSAIDs.

### 8. Dr. Pradeep Adlakha

M.B.B.S., MS Orthopaedic, Narayan Hospital & Trauma Centre, Rudrapur, Uttarakhand

In my clinical practice, I prefer Diclofenac over Etoricoxib due to its lower adverse event incidence, especially hypertension, and reduced patient discontinuation. Concerns about Etoricoxib's higher risk of edema-related discontinuation and BP issues make Diclofenac preferable, particularly for those with renovascular disease or existing hypertension. In addition, the elevated risk of CHF with a high dose of Etoricoxib makes opting for Diclofenac prudent, especially for patients with pre-existing heart failure risk factors. For 70–90% of patients experiencing relief from synovial inflammation, Diclofenac is a preferred choice, offering faster relief with its lower IC50 among NSAIDs.

#### 9. Dr. Vivek Loomba

M.B.B.S., DA, Indian spinal injuries center, New Delhi, Delhi

In my clinical practice, I lean toward Diclofenac over Etoricoxib for OA pain management due to its effectiveness, lower risk of adverse events, and reduced likelihood of treatment discontinuation. Given concerns about hypertension, edema, and CHF linked to Etoricoxib, Diclofenac emerges as a preferable choice with a well-balanced efficacy and safety profile, especially for patients with pre-existing hypertension or renal issues. Diclofenac, known for its swift synovial fluid penetration, delivers relief to over 90% of OA patients. Opting for Diclofenac over Etoricoxib is my preference when faster relief is needed, given its lower IC50 among NSAIDs, resulting in a quicker onset of action.

#### 10. Dr. Rama Kant Gupta

D. Ortho, MS Ortho, Sobhagya Medical center, Delhi

I prefer Diclofenac over Etoricoxib for OA pain management due to its superior effectiveness, lower risk of adverse events, and reduced likelihood of treatment discontinuation. Due to concerns about hypertension, edema, and CHF associated with Etoricoxib, Diclofenac emerges as a preferred option, providing a well-balanced efficacy and safety profile, especially for patients with pre-existing hypertension or renal issues. Diclofenac's rapid penetration into synovial fluid results in relief for 70–90% of OA patients. Opting for Diclofenac over Etoricoxib is my choice when faster relief is necessary, thanks to its lower IC50 among NSAIDs, which leads to a quicker onset of action.

#### 11. Dr. Vivek Agarwal

DNB Orthopaedic, AODDC, Chitra Vihar, Delhi

In my clinical practice, I lean toward Diclofenac over Etoricoxib for managing OA pain due to its effectiveness,

lower risk of adverse events, and reduced likelihood of treatment discontinuation. Given concerns about hypertension, edema, and CHF linked to Etoricoxib, Diclofenac emerges as a preferable choice with a well-balanced efficacy and safety profile, especially for patients with pre-existing hypertension or renal issues. Diclofenac, known for its swift synovial fluid penetration, delivers relief to over 90% of OA patients. Opting for Diclofenac over Etoricoxib is my preference when faster relief is needed, given its lower IC50 among NSAIDs, resulting in a quicker onset of action.

#### 12. Dr. Manoj Kumar Shukla

MS Ortho, Ballia Trauma Centre, Ballia, Uttar Pradesh

I favor Diclofenac over Etoricoxib for managing OA pain due to its superior effectiveness, lower risk of adverse events, and decreased likelihood of treatment discontinuation. Given concerns about hypertension, edema, and CHF associated with Etoricoxib, Diclofenac stands out as a preferred choice, offering a well-balanced efficacy and safety profile, especially for patients with pre-existing hypertension or renal issues. Diclofenac's swift penetration into synovial fluid provides relief for 70–90% of OA patients. Opting for Diclofenac over Etoricoxib is my preference when faster relief is necessary, because of its lower IC50 among NSAIDs, resulting in a quicker onset of action.

#### 13. Dr. Riddhivardhan Chordia

M.B.B.S., D. Ortho, DNB, Lokpriya hospital, Meerut, Uttar Pradesh

In my medical practice, I lean toward choosing Diclofenac over Etoricoxib for the management of OA pain due to its effectiveness, lower risk of adverse events, and reduced likelihood of treatment discontinuation. Given the concerns related to hypertension, edema, and CHF associated with Etoricoxib, Diclofenac emerges as the preferred option, offering a well-balanced efficacy and safety profile, especially for patients with pre-existing hypertension or renal issues. Diclofenac, recognized for its swift penetration into synovial fluid, brings relief to over 90% of OA patients. Opting for Diclofenac over Etoricoxib is my choice when quicker relief is needed, given its lower IC50 among NSAIDs, resulting in a faster onset of action.

#### 14. Dr. Arnab Karmakar

MS, DNB Orthopaedic, Welkin Medicare, Kolkata, West Bengal

In my medical practice, I prefer choosing Diclofenac over Etoricoxib for the management of OA pain due

to its effectiveness, lower risk of adverse events, and decreased likelihood of treatment discontinuation. Owing to the concerns related to hypertension, edema, and CHF associated with Etoricoxib, Diclofenac emerges as the preferred option, offering a well-balanced efficacy and safety profile, particularly for patients with pre-existing hypertension or renal issues. Diclofenac, recognized for its rapid penetration into synovial fluid, brings relief to more than 90% of OA patients. Selecting Diclofenac over Etoricoxib is my choice when quicker relief is needed, given its lower IC50 among NSAIDs, resulting in a faster onset of action.

#### 15. Dr. Amit Sehgal

MS Orthopaedic, Medical college, Jhansi, Uttar Pradesh

In my medical practice, I would prescribe Diclofenac to patients with CKD due to its lower risk of acute interstitial nephritis. Diclofenac, recognized for its swift penetration into synovial fluid, may bring relief to about 70–90% of OA patients.

#### 16. Dr. Praveen Goyal

MS Ortho, Gopi Krishna Hospital, Mathura, Uttar Pradesh

In my clinical practice, I prefer Diclofenac over Etoricoxib for OA pain management due to its effectiveness. I would recommend Diclofenac to patients with existing hypertension. Diclofenac is a judicious choice for patients with pre-existing heart failure risk factors. With a balanced efficacy and safety profile, Diclofenac, with its rapid synovial fluid penetration, provides relief in about 70–90% of patients with OA. In CKD patients, opting for Diclofenac is advisable due to its lower risk of acute interstitial nephritis, especially considering the limited evidence on the utility of Etoricoxib. I would choose Diclofenac over Etoricoxib for patients requiring faster relief due to its lower IC50 among NSAIDs, resulting in a quicker onset of action.

#### 17. Dr. Varun Sharma

M.B.B.S., D. Ortho, Life line hospital, Firozabad, Uttar Pradesh

I favor Diclofenac over Etoricoxib for managing OA pain due to its superior effectiveness, lower risk of adverse events, and decreased likelihood of treatment discontinuation. Given concerns about hypertension, edema, and CHF associated with Etoricoxib, Diclofenac stands out as a preferred choice, offering a well-balanced efficacy and safety profile, particularly for patients with pre-existing hypertension or renal issues. Diclofenac's swift penetration into synovial fluid provides relief for 70–90% of OA patients. Opting for Diclofenac over Etoricoxib

is my preference when faster relief is necessary due to its lower IC50 among NSAIDs, resulting in a quicker onset of action.

#### 18. Dr. Shubhang Aggarwal

M.Ch., Ortho. (U.K.), NHS Hospital, Jalandhar, Punjab

In my clinical experience, I favor Diclofenac over Etoricoxib for OA pain management due to its effectiveness, lower adverse event incidence (especially hypertension), and reduced patient discontinuation. Due to Etoricoxib's higher risk of CHF, particularly at a high dose, Diclofenac is a prudent choice for those with heart failure risk factors. Diclofenac, due to its rapid penetration of the synovial fluid, is effective against synovial inflammation in 70–90% of patients with OA. I would choose Diclofenac over Etoricoxib for faster relief.

#### 19. Dr. Nitin Sharma

M.B.B.S., MS, Nova skin and orthopaedic Centre, Delhi

I lean toward choosing Diclofenac over Etoricoxib for the management of OA pain due to its superior effectiveness, lower risk of adverse events, and decreased likelihood of treatment discontinuation. Given concerns about hypertension, edema, and CHF associated with Etoricoxib, Diclofenac stands out as the preferred option, providing a well-balanced efficacy and safety profile, especially for patients with pre-existing hypertension or renal issues. Diclofenac's rapid penetration into synovial fluid brings relief to 70–90% of OA patients. Opting for Diclofenac over Etoricoxib is my choice when quicker relief is necessary due to its lower IC50 among NSAIDs, resulting in a faster onset of action.

#### 20. Dr. Pradeep Tripathi

MS Ortho, Ratnadeep Hospital and research center Sarvodaya Nagar, Kanpur, Uttar Pradesh

Diclofenac is my preferred option for OA pain management due to its effectiveness. In my clinical practice, I choose Diclofenac over Etoricoxib due to its lower incidence of adverse events, including hypertension. Concerns about Etoricoxib's higher risk of oedema-related discontinuation and BP issues make Diclofenac preferable, especially for patients with renovascular disease or existing hypertension. In addition, considering the elevated risk of CHF with a high dose of Etoricoxib, opting for Diclofenac is prudent, particularly in patients with pre-existing heart failure risk factors. Diclofenac is likely to provide relief to a significant majority of patients, exceeding 90%, by rapidly penetrating synovial fluid in individuals with OA. I prefer Diclofenac over Etoricoxib for faster relief, given its lower IC50 among NSAIDs, ensuring a quicker onset of action.

**21. Dr. Sanjeev Kumar Jaiswal**

MS Ortho, Dr. O P Jaiswal memorial hospital, Raebareli, Uttar Pradesh

I prefer selecting Diclofenac for managing OA pain due to its superior effectiveness, lower risk of adverse events, and reduced likelihood of treatment discontinuation. Concerns about hypertension, edema, and CHF associated with Etoricoxib make Diclofenac the preferred choice, offering a well-balanced efficacy and safety profile, especially for patients with pre-existing hypertension or renal issues. Diclofenac's swift penetration into synovial fluid provides relief for 70–90% of OA patients. Opting for Diclofenac over Etoricoxib is my preference when faster relief is necessary, given its lower IC50 among NSAIDs, resulting in a quicker onset of action.

**22. Dr. Varun Joshi**

M.B.B.S., MS, Joshi hospital, Jalandhar, Punjab

I prefer using Diclofenac for pain management in patients with OA. Diclofenac manifests a balanced efficacy and safety profile through COX-1 and COX-2 inhibition. Diclofenac's rapid penetration into synovial fluid provides relief for 70–90% of OA patients.

**23. Dr. Sher Bahadur Singh**

M.B.B.S., M. S. (Orthopaedic), Private Chamber, Contai, West Bengal

I consider Diclofenac to be the preferable choice for patients with renovascular disease compared to Etoricoxib. Diclofenac demonstrates a well-balanced effectiveness and safety profile, thanks to its inhibition of both COX-1 and COX-2. The rapid entry of Diclofenac into synovial fluid offers relief for 70–90% of individuals with OA. I would choose Diclofenac over Etoricoxib for patients requiring faster relief.

**24. Dr. Pulak Saha**

MS Ortho, Orthopaedic clinic, Agartala, Tripura

In my clinical practice, I prefer Diclofenac over Etoricoxib for OA pain management due to its effectiveness. It is a preferable option for patients with renovascular disease and pre-existing hypertension. In addition, the higher risk of CHF with Etoricoxib, especially at a high dose, makes Diclofenac a prudent choice in patients with pre-existing heart failure risk factors. With a balanced efficacy and safety profile, Diclofenac, with its rapid synovial fluid penetration, provides relief in about 70–90% of patients with OA. I would choose Diclofenac over Etoricoxib for patients requiring faster relief.

**25. Dr. Arnab Kumar Saha**

M.B.B.S., Diploma, Angel Nursing Home, Kolkata, West Bengal

In my clinical experience, I favor Diclofenac over Etoricoxib for OA pain management due to its effectiveness, lower adverse event incidence (especially hypertension), and reduced patient discontinuation. Given Etoricoxib's higher risk of CHF, particularly at a high dose, Diclofenac is a prudent choice for those with heart failure risk factors. Opting for Diclofenac is advisable for CKD patients. Diclofenac, due to its rapid penetration of the synovial fluid, is effective against synovial inflammation in 70–90% of patients with OA. I would choose Diclofenac over Etoricoxib for faster relief due to its lower IC50 among NSAIDs, ensuring a quicker onset of action.

**26. Dr. Sk Moinuddin**

M.B.B.S., MS (Orthopaedic), Malda, West Bengal

I prefer Diclofenac over Etoricoxib due to its lower adverse event incidence, especially hypertension, and reduced patient discontinuation. In addition, the elevated risk of CHF with a high dose of Etoricoxib makes opting for Diclofenac prudent, especially for patients with pre-existing heart failure risk factors. Opting for Diclofenac is advisable for CKD patients. For 70–90% of patients experiencing relief from synovial inflammation, Diclofenac is a preferred choice, offering faster relief with its lower IC50 among NSAIDs.

**27. Dr. Avnish Kumar Mishra**

MS Orthopaedic, Ak hospital and trauma centre, Ghazipur, Uttar Pradesh

I favor Diclofenac over Etoricoxib for managing OA pain due to its superior effectiveness, lower risk of adverse events, and decreased likelihood of treatment discontinuation. Given concerns about hypertension, edema, and CHF associated with Etoricoxib, Diclofenac stands out as a preferred choice, offering a well-balanced efficacy and safety profile, particularly for patients with pre-existing hypertension or renal issues. Diclofenac's swift penetration into synovial fluid provides relief for 70–90% of OA patients. Opting for Diclofenac over Etoricoxib is my preference when faster relief is necessary, thanks to its lower IC50 among NSAIDs, resulting in a quicker onset of action.

**28. Dr. Sankalp Bali**

M.B.B.S., DNB (Ortho), Tirath Ram Shah Hospital, Delhi

Diclofenac is a preferred choice for OA pain management. In my clinical experience, I favor Diclofenac over Etoricoxib

due to its lower incidence of adverse events, including hypertension. Concerns about Etoricoxib's higher risk of edema-related discontinuation and BP destabilization make Diclofenac preferable, especially for patients with renovascular disease or existing hypertension. Opting for Diclofenac is sensible, particularly in patients with pre-existing heart failure risk factors. A significant majority of patients, more than 90%, are likely to experience relief in synovial inflammation after treatment with Diclofenac, given its observed rapid penetration of synovial fluid in individuals with OA. I would choose Diclofenac over Etoricoxib for faster relief, given its lower IC50 among NSAIDs.

### 29. Dr. Siddharth Saran

MS Ortho, Saran Nursing Home, Sultanpur, Uttar Pradesh

I prefer Diclofenac for OA pain management due to its superior effectiveness, lower risk of adverse events, and reduced likelihood of treatment discontinuation compared to Etoricoxib. Concerns about hypertension, edema, and CHF associated with Etoricoxib make Diclofenac a preferred choice, offering a well-balanced efficacy and safety profile, particularly for patients with pre-existing hypertension or renal issues. Diclofenac's rapid penetration into synovial fluid provides relief for 70–90% of OA patients. Opting for Diclofenac over Etoricoxib is my preference when faster relief is necessary because of its lower IC50 among NSAIDs, resulting in a quicker onset of action.

### 30. Dr. A.K. Agarwal

M.B.B.S., MS, MCH, Satya Hospital, Kanpur, Uttar Pradesh

When it comes to managing OA pain, I personally favor Diclofenac over Etoricoxib because of its increased efficacy, decreased risk of adverse events, and decreased chance of treatment cessation. Diclofenac is a better option since it has a well-balanced efficacy and safety profile and is less likely to cause hypertension, edema, or CHF than Etoricoxib. This is especially true for individuals who already have hypertension or renal problems. Diclofenac relieves OA pain in 70–90% of cases due to its quick absorption into synovial fluid. Because Diclofenac has a lower IC50 than other NSAIDs and so acts more quickly, I prefer it when faster relief is needed.

### 31. Dr. Chinmay Nath

M.B.B.S., MS (Ortho), MRCS (Edin), Samonnoy Clinic Barasat, Apollo Multispecialty Hospital, Kolkata, West Bengal

I favor Diclofenac over Etoricoxib due to its lower adverse event incidence, especially hypertension, and reduced

patient discontinuation. In addition, the elevated risk of CHF with a high dose of Etoricoxib makes opting for Diclofenac prudent, especially for patients with pre-existing heart failure risk factors. About 70–90% of patients on Diclofenac, experience relief from synovial inflammation, Diclofenac is a preferred choice, offering faster relief with its lower IC50 among NSAIDs.

### 32. Dr. Ashish Singh

M.B.B.S., MS Orthopaedic, SKD Hospital, Lucknow, Uttar Pradesh

In my clinical experience, I favor Diclofenac over Etoricoxib for OA pain management due to its effectiveness, lower adverse event incidence (especially hypertension), and reduced patient discontinuation. Given Etoricoxib's higher risk of CHF, particularly at a high dose, Diclofenac is a practical choice for those with heart failure risk factors. Diclofenac, due to its rapid penetration of the synovial fluid, is effective against synovial inflammation in 70–90% of patients with OA. I would choose Diclofenac over Etoricoxib for faster relief due to its lower IC50 among NSAIDs, ensuring a quicker onset of action.

### 33. Dr. Arindam Basu

M.B.B.S., MS Orthopaedic, Sonoscan Malda, West Bengal

In my clinical practice, I prefer Diclofenac over Etoricoxib for OA pain management due to its effectiveness. It is a preferable option for patients with renovascular disease and pre-existing hypertension. Diclofenac is also a prudent choice for patients with pre-existing heart failure risk factors. With a balanced efficacy and safety profile, Diclofenac, with its rapid synovial fluid penetration, provides relief in about 70–90% of patients with OA. In CKD patients, opting for Diclofenac is advisable. I would choose Diclofenac over Etoricoxib for patients requiring faster relief.

### 34. Dr. Banamali Samanta

MS Orthopaedic, IPGME&R, Kolkata, West Bengal

In my medical practice, I prefer Diclofenac over Etoricoxib due to its lower adverse event incidence, especially hypertension, and reduced patient discontinuation. It could be a preferable drug for patients with existing hypertension. For more than 90% of patients experiencing relief from synovial inflammation, Diclofenac is a preferred choice, offering faster relief with its lower IC50 among NSAIDs.

### 35. Dr. Deepak Srivastav

MS Orthopaedic, Hind Institute of Medical Sciences, Safedabad, Barabanki, Uttar Pradesh



In my clinical practice, I choose Diclofenac over Etoricoxib for OA pain management due to its lower incidence of adverse events, particularly hypertension, and reduced patient discontinuation rates. It may be a preferable option for individuals with existing hypertension. Diclofenac provides a well-balanced safety profile and is advisable for patients with CKD. With over 90% of patients experiencing relief from synovial inflammation, Diclofenac is a preferred choice, delivering faster relief due to its lower IC50 among NSAIDs.

### 36. Dr. Anjan Chattaraj

M.B.B.S., MS Ortho, Care Hospital, Kolkata, West Bengal

In my clinical practice, I prefer Diclofenac over Etoricoxib due to its lower adverse event incidence, especially hypertension, and reduced patient discontinuation. I would surely recommend Diclofenac in patients with pre-existing heart failure risk factors. About 70–90% of patients' experience relief in synovial inflammation with Diclofenac. Diclofenac is a preferred choice, offering faster relief with its lower IC50 among NSAIDs.

### 37. Dr. Mrityunjoy Patar

M.B.B.S., MS Orthopaedic, Khosbagan, Burdwan, West Bengal

I prefer Diclofenac for OA pain management due to its superior effectiveness, lower risk of adverse events, and reduced likelihood of treatment discontinuation compared to Etoricoxib. Concerns about hypertension, edema, and CHF associated with Etoricoxib make Diclofenac a preferred choice, offering a well-balanced efficacy and safety profile, particularly for patients with pre-existing hypertension or renal issues. Diclofenac's rapid penetration into synovial fluid provides relief for 70–90% of OA patients. Opting for Diclofenac over Etoricoxib is my preference when faster relief is necessary, thanks to its lower IC50 among NSAIDs, resulting in a quicker onset of action.

### 38. Dr. Soumyadeep DuttaRoy

MS Orthopaedic, NRS Medical College, Kolkata, West Bengal

In my clinical practice, I prefer Diclofenac over Etoricoxib due to its lower adverse event incidence, especially hypertension, and reduced patient discontinuation. In addition, the elevated risk of CHF with a high dose of Etoricoxib makes opting for Diclofenac prudent, especially for patients with pre-existing heart failure risk factors. I think Diclofenac offers a well-balanced efficacy and safety profile and can be advised in CKD patients. For 70–90% of patients experiencing relief from synovial inflammation,

Diclofenac is a preferred choice, offering faster relief with its lower IC50 among NSAIDs.

### 39. Dr. Irfan Khan

M.B.B.S., MS, KIZ Hospital, Jaunpur, Uttar Pradesh

I prefer Diclofenac for OA pain management due to its superior effectiveness, lower risk of adverse events, and reduced likelihood of treatment discontinuation compared to Etoricoxib. Concerns about hypertension, edema, and CHF associated with Etoricoxib make Diclofenac a preferred choice, offering a well-balanced efficacy and safety profile, particularly for patients with pre-existing hypertension or renal issues. Diclofenac's rapid penetration into synovial fluid brings relief to 70–90% of OA patients. When faster relief is needed, I prefer Diclofenac due to its lower IC50 among NSAIDs, resulting in a quicker onset of action.

### 40. Dr. Sanjib Goswami

MS Orthopaedic surgery, Trust Medicos, Guwahati, Assam

In my medical practice, I prefer Diclofenac over Etoricoxib due to its lower adverse event incidence, especially hypertension, and reduced patient discontinuation. It is also a preferable option for patients with renovascular disease and pre-existing hypertension. In addition, the elevated risk of CHF with a high dose of Etoricoxib makes opting for Diclofenac prudent, especially for patients with pre-existing heart failure risk factors. I think that Diclofenac offers a well-balanced efficacy and safety profile and can be advised in CKD patients. For 70–90% of patients experiencing relief from synovial inflammation, Diclofenac is a preferred choice, offering faster relief with its lower IC50 among NSAIDs.

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