



BACK

Prescribing Information For the use of Registered Medical Practitioner, Hospital or a Laboratory Only.

DYNAPAR

Diclofenac Sodium and Paracetamol Tablets

COMPOSITION:

Each uncoated tablet contains: Diclofenac Sodium BP 50 mg, Paracetamol BP 500 mg.

EXCIPENTS:

Starch (Maize), Methylparaben, Propylparaben, Purified Water, Colloidal Silicon Dioxide, Magnesium Stearate, Sodium Starch Glycolate, Talc, Colour Indigo Carmine Supra.

LISTE OF EXCIPENTS WITH NOTORIOUS EFFECTS:

Methylparaben, propylparaben.

DESCRIPTION:

Diclofenac sodium is a benzene-acetic acid derivative, Paracetamol, 4'-hydroxyacetanilide, is a non-opiate, non-salicylate analgesic and antipyretic.

CLINICAL PHARMACOLOGY:

Diclofenac sodium:

Diclofenac sodium is a nonsteroidal anti-inflammatory drug (NSAID) that exhibits anti-inflammatory, analgesic, and antipyretic activities. The mechanism of action of diclofenac, like that of other NSAIDs may be related to prostaglandin synthetase inhibition. Diclofenac is 100% absorbed after oral administration. However, due to first-pass metabolism, only about 50% of the absorbed dose is systemically available. Food has no significant effect on the extent of diclofenac absorption. However, there is usually a delay in the onset of absorption of 1 to 4.5 hours and a reduction in peak plasma levels of <20%. The absolute bioavailability (%) of diclofenac is 55. Tmax (hr) = 2.3. Oral Clearance (CLP, mL/min) = 582. Renal Clearance (% unchanged drug in urine) <1. Apparent Volume of Distribution (V<sub>d</sub>, L/kg) = 1.4 and Terminal Half-Life (hr) is 2.2. Diclofenac is more than 98% bound to human serum proteins, primarily to albumin. Serum protein binding is constant over the concentration range (0.15-105 µg/mL) achieved with recommended doses. Diclofenac diffuses into and out of the synovial fluid. Diffusion into the joint occurs when plasma levels are higher than the synovial fluid, after which the process reverses and synovial fluid levels are higher than plasma levels. It is not known whether diffusion into the joint plays a role in the effectiveness of diclofenac.

Five diclofenac metabolites have been identified in human plasma and urine. The metabolites include 4-hydroxy-, 5-hydroxy-, 3-hydroxy-, 4'-5-dihydroxy- and 5-hydroxy-4'-methoxy diclofenac. Diclofenac metabolites undergo further glucuronidation and sulfation followed by biliary excretion. One diclofenac metabolite 4'-hydroxy-diclofenac has very weak pharmacologic activity.

Diclofenac is eliminated through metabolism and subsequent urinary and biliary excretion of the glucuronide and the sulfate conjugates of the metabolites. Little or no free unchanged diclofenac is excreted in the urine. Approximately 65% of the dose is excreted in the urine and approximately 35% in the bile as conjugates of unchanged diclofenac plus metabolites. The terminal half-life of unchanged diclofenac is approximately 2 hours.

Paracetamol:

Paracetamol is a peripherally acting analgesic and is well absorbed orally. Paracetamol produces analgesia by elevation of the pain threshold and antipyresis through action on the hypothalamic heat regulating center. The plasma elimination half-life ranges from 1 to 4 hours for Paracetamol. Paracetamol is distributed throughout most fluids of the body, and is metabolized primarily in the liver. Little unchanged drug is excreted in the urine, but most metabolic products appear in the urine within 24 hours.

INDICATIONS:

Painful, inflammatory musculoskeletal conditions

DOSSAGE & ADMINISTRATION:

1 tablet two-three times daily after meals.

CONTRAINDICATIONS:

**Diclofenac:** Diclofenac sodium is contraindicated in patients with known hypersensitivity to diclofenac. Diclofenac should not be given to patients who have experienced asthma, urticaria, or other allergic-type reactions after taking aspirin or other NSAIDs. Severe, rarely fatal, anaphylactoid-like reactions to NSAIDs have been reported in such patients. Diclofenac is contraindicated for the treatment of peri-operative pain in the setting of coronary artery bypass graft (CABG) surgery.

Contraindicated in children under 14 years of age.

Paracetamol:

Paracetamol should not be administered to patients who have previously exhibited hypersensitivity to it.

WARNINGS:

Diclofenac:

Cardiovascular Events:

Cardiovascular Thrombotic Events: All NSAIDs, both COX-2 selective and nonselective, may have a similar risk of serious cardiovascular (CV) thrombotic events, myocardial infarction, and stroke, which can be fatal. To minimize the potential risk for an adverse CV event in patients treated with an NSAID, the lowest effective dose should be used for the shortest duration possible. Physicians and patients should remain alert for the

development of such events, even in the absence of previous CV symptoms. Patients should be informed about the signs and/or symptoms of serious CV events and the steps to take if they occur.

**Hypertension:** NSAIDs, including diclofenac, can lead to onset of new hypertension or worsening of pre-existing hypertension, either of which may contribute to the increased incidence of CV events. Patients taking thiazides or loop diuretics may have impaired response to these therapies when taking NSAIDs. NSAIDs, including diclofenac, should be used with caution in patients with hypertension. Blood pressure (BP) should be monitored closely during the initiation of NSAID treatment and throughout the course of therapy.

**Congestive Heart Failure and Edema Renal Effects:** Fluid retention and edema have been observed in some patients taking NSAIDs. Diclofenac should be used with caution in patients with fluid retention or heart failure.

Gastrointestinal Effects - Risk of Ulceration, Bleeding, and Perforation:

NSAIDs, including diclofenac, can cause serious gastrointestinal (GI) adverse events including inflammation, bleeding, ulceration, and perforation of the stomach, small intestine, or large intestine, which can be fatal. Only one in five patients, who develop a serious upper GI adverse event on NSAID therapy, is symptomatic. NSAIDs should be prescribed with extreme caution in those with a prior history of ulcer disease or gastrointestinal bleeding. Patients with a prior history of peptic ulcer disease and/or gastrointestinal bleeding who use NSAIDs have a greater than 10-fold increased risk for developing a GI bleed compared to patients with neither of these risk factors. Other factors that increase the risk for GI bleeding in patients treated with NSAIDs include concomitant use of oral corticosteroids or anticoagulants, longer duration of NSAID therapy, smoking, use of alcohol, older age, and poor general health status. Most spontaneous reports of fatal GI events are in elderly or debilitated patients and therefore, special care should be taken in treating this population. Patients and physicians should remain alert for signs and symptoms of GI ulceration and bleeding during NSAID therapy and promptly initiate additional evaluation and treatment if a serious GI adverse event is suspected. This should include discontinuation of the NSAID until a serious GI adverse event is ruled out.

Renal Effects:

Caution should be used when initiating treatment with diclofenac in patients with considerable dehydration.

Long-term administration of NSAIDs has resulted in renal papillary necrosis and other renal injury. Renal toxicity has also been seen in patients in whom renal prostaglandins have a compensatory role in the maintenance of renal perfusion. In these patients, administration of a nonsteroidal antiinflammatory drug may cause a dose-dependent reduction in prostaglandin formation and, secondarily, in renal blood flow, which may precipitate overt renal decompensation. Patients at greatest risk of this reaction are those with impaired renal function, heart failure, liver dysfunction, those taking diuretics and ACE inhibitors, and the elderly. Discontinuation of NSAID therapy is usually followed by recovery to the pretreatment state.

Advanced Renal Disease:

Treatment with diclofenac is not recommended in patients with advanced renal disease. If diclofenac therapy must be initiated, close monitoring of the patient's renal function is advisable.

Anaphylactoid Reactions:

As with other NSAIDs, anaphylactoid reactions may occur in patients without known prior exposure to diclofenac. Diclofenac should not be given to patients with the aspirin triad. This symptom complex typically occurs in asthmatic patients who experience rhinitis with or without nasal polyps, or who exhibit severe, potentially fatal bronchospasm after taking aspirin or other NSAIDs. Emergency help should be sought in cases where an anaphylactoid reaction occurs.

Skin Reactions:

NSAIDs, including diclofenac, can cause serious skin adverse events such as exfoliative dermatitis, Stevens-Johnson Syndrome (SJS), and toxic epidermal necrolysis (TEN), which can be fatal. These serious events may occur without warning. Patients should be informed about the signs and symptoms of serious skin manifestations and use of the drug should be discontinued at the first appearance of skin rash or any other sign of hypersensitivity.

Pregnancy:

In late pregnancy, as with other NSAIDs, diclofenac should be avoided because it may cause premature closure of the ductus arteriosus.

Paracetamol:

Do not take the product for pain for more than 10 days. If new symptoms occur, or if redness or swelling is present, consult a physician because these could be signs of a serious condition. Do not use with other products containing Paracetamol.

As with any drug, if you are pregnant or nursing a baby, seek the advice of a health professional before using this product. In the case of accidental overdose, contact a doctor or a poison control Center immediately. Prompt medical attention is critical for adults as well as for children.

**ALCOHOL WARNING:** If you generally consume 3 or more alcohol-containing drinks per day, you should consult your physician for advice on when and how you should take Paracetamol and other pain relievers.

WARNINGS DUE TO EXCIPENTS:

This medicine contains parabens which may cause allergic reactions (possibly delayed).

PRECAUTIONS:

Diclofenac:

General:

Diclofenac sodium cannot be expected to substitute for corticosteroids or to treat corticosteroid insufficiency. Abrupt discontinuation of corticosteroids may lead to disease exacerbation. Patients on prolonged corticosteroid therapy should have their therapy tapered slowly if a decision is made to discontinue corticosteroids.

Hepatic Effects:

For both the elevations of one or more liver tests may occur in up to 15% of patients taking NSAIDs including diclofenac. In patients on chronic treatment with diclofenac, periodic monitoring of transaminases is recommended. Rare cases of severe hepatic reactions, including jaundice and fatal fulminant hepatitis, liver necrosis and hepatic failure, some of them with fatal outcomes have been reported. A patient with symptoms and/or signs suggesting liver dysfunction, or in whom an abnormal liver test has occurred, should be evaluated for evidence of the development of a more severe hepatic reaction while on therapy with diclofenac. If clinical signs and symptoms consistent with liver disease develop, or if systemic manifestations occur (e.g., eosinophilia, rash, etc.), diclofenac should be discontinued.

Hematological Effects:

Anemia is sometimes seen in patients receiving NSAIDs, including diclofenac. This may be due to fluid retention, occult or gross GI loss, or an incompletely described effect upon erythropoiesis. Patients on long-term treatment with NSAIDs, including diclofenac, should have their hemoglobin or hematocrit checked if they exhibit any signs or symptoms of anemia.

NSAIDs inhibit platelet aggregation and have been shown to prolong bleeding time in some patients. Patients receiving diclofenac who may be adversely affected by alterations in platelet function, such as those with coagulation disorders or patients receiving anticoagulants, should be carefully monitored.

Preexisting Asthma:

Diclofenac should not be administered to patients with aspirin sensitivity and should be used with caution in patients with preexisting asthma.

Pregnancy:

Diclofenac should be used in pregnancy only if the potential benefit justifies the potential risk to the fetus.

**Nonteratogenic Effects:** Because of the known effects of nonsteroidal anti-inflammatory drugs on the fetal cardiovascular system (closure of ductus arteriosus), use during pregnancy (particularly late pregnancy) should be avoided.

Labor and Delivery:

The effects of diclofenac on labor and delivery in pregnant women are unknown.

Nursing Mothers:

It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk and because of the potential for serious adverse reactions in nursing infants from diclofenac, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

Pediatric Use:

Not indicated in children under 14 years of age.

Geriatric Use:

As with any NSAIDs, caution should be exercised in treating the elderly (65 years and older).

Paracetamol:

If a severe sensitivity reaction occurs, the drug should be stopped.

DRUG INTERACTIONS:

Diclofenac:

**Aspirin:** When diclofenac is administered with aspirin, its protein binding is reduced. The clinical significance of this interaction is not known; however, as with other NSAIDs, concomitant administration of diclofenac and aspirin is not generally recommended because of the potential of increased adverse effects.

**Methotrexate:** NSAIDs could enhance the toxicity of methotrexate. Caution should be used when NSAIDs are administered concomitantly with methotrexate.

**Cyclosporine:** Diclofenac, like other NSAIDs may increase cyclosporine's nephrotoxicity. Caution should be used when diclofenac is administered concomitantly with cyclosporine. ACE-inhibitors: Reports suggest that NSAIDs may diminish the antihypertensive effect of ACE inhibitors. This interaction should be given consideration in patients taking NSAIDs concomitantly with ACE inhibitors.

**Diuretics:** Diclofenac can reduce the natriuretic effect of furosemide and thiazides in some patients. This response has been attributed to inhibition of renal prostaglandin synthesis. During concomitant therapy with NSAIDs, the patient should be observed closely for signs of renal failure, as well as to assure diuretic efficacy.

**Lithium:** NSAIDs have produced an elevation of plasma lithium levels and a reduction in renal lithium clearance. The mean minimum lithium concentration increased 15% and the renal clearance was decreased by approximately 20%. These effects have been attributed to inhibition of renal prostaglandin synthesis by the NSAID. Thus, when NSAIDs and lithium are administered concurrently, subjects should be observed carefully for signs of lithium toxicity.

**Warfarin:** The effects of warfarin and NSAIDs on GI bleeding are synergistic, such that users of both drugs together have a risk of serious GI bleeding higher than users of either drug alone.

Paracetamol:

Patients who concomitantly medicate with warfarin-type anticoagulants and regular doses of Paracetamol have occasionally been reported to have unforeseen elevations in their INR. Physicians should be cognizant of this potential interaction and monitor the INR in such patients closely while therapy is established.

ADVERSE EFFECTS:

Diclofenac:

In patients taking diclofenac sodium, or other NSAIDs, the most frequently reported adverse experiences occurring in approximately 1%-10% of patients are Gastrointestinal experiences including abdominal pain, constipation, diarrhea, dyspepsia, flatulence, gross bleeding/perforation, heartburn, nausea, GI ulcers (gastric/duodenal) and vomiting; Abnormal renal function, anemia, dizziness, edema, elevated liver enzymes, headaches, increased bleeding time, pruritus, rashes and tinnitus.

Paracetamol:

When used as directed, Paracetamol is virtually free of severe toxicity or side effects. The classic gastrointestinal irritation associated with nonsteroidal anti-inflammatory drugs, including ASA does not occur with Paracetamol. Sensitivity reactions are rare. Cross-reactivity in ASA sensitive persons has been rarely reported. If sensitivity is suspected, discontinue use of the drug.

OVERDOSE:

Diclofenac:

Patients should be managed by symptomatic and supportive care following a NSAID overdose. There are no specific antidotes. Emesis and/or activated charcoal (50 to 100 g in adults, 1 to 2 g/kg in children) and/or osmotic cathartic may be indicated in patients seen within 4 hours of ingestion with symptoms or following a large overdose (5 to 10 times the usual dose). Forced diuresis, alkalization of urine, hemodialysis, or hemoperfusion may not be useful due to high protein binding.

Paracetamol:

In adults, hepatic toxicity has rarely been reported with acute overdoses of less than 10 grams and fatalities with less than 15 grams. Importantly, young children seem to be more resistant than adults to the hepatotoxic effect of an Paracetamol overdose. Despite this, the measures outlined below should be initiated in any adult or child suspected of having ingested a Paracetamol overdose.

**Treatment:** The stomach should be emptied promptly by lavage or by induction of emesis with syrup of ipecac. Patients' estimates of the quantity of a drug ingested are notoriously unreliable. Therefore, if an Paracetamol overdose is suspected, a serum Paracetamol assay should be obtained as early as possible, but no sooner than four hours following ingestion. Liver function studies should be obtained initially and repeated at 24-hour intervals. The antidote, N-acetylcysteine, should be administered as early as possible, preferably within 16 hours of the overdose ingestion for optimal results, but in any case, within 24 hours. Following recovery, there are no residual, structural or functional hepatic abnormalities. For additional emergency information, call your regional poison center.

ALCOHOL INFORMATION:

Chronic heavy alcohol abusers may be at increased risk of liver toxicity from excessive Paracetamol use. Professionals should alert their patients who regularly consume large amounts of alcohol not to exceed recommended doses of Paracetamol.

STORAGE:

Store below 30°C, protected from light. Keep all medicines out of the reach and the sight of children.

PRESENTATION:

Dynapar is available in blister of 10 Tablets and such 2 blisters are packed in a carton. Dynapar is available in blister of 10 Tablets and such 10 blisters are packed in a carton.

Condition of Deliverance: - List II

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Manufactured by : **Troika Pharmaceuticals Ltd.**  
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