

PRESCRIBING INFORMATION (SUMMARY OF PRODUCT CHARACTERISTICS)

1. NAME OF THE MEDICINAL PRODUCT

Dynapar QPS, 15 & 30 ml

Product Distribution Category: Prescription Only Medicine

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Qualitative Declaration

Diclofenac Diethylamine as Diclofenac Sodium

Quantitative Declaration

Each ml contains:

Diclofenac Diethylamine BP4.64% w/v
Equivalent to Diclofenac Sodium BP4.00% w/v
Absolute Alcohol BP10.00% v/v
Butylated Hydroxytoluene BP0.03% w/v
Butylated hydroxyanisole BP0.03% w/v

For the full list of excipients, see section 6.1

3. PHARMACEUTICAL FORM

Topical solution.

A clear, colourless to yellow coloured solution.

4. CLINICAL PARTICULARS

4.1 *Therapeutic indications*

DYNAPAR QPS is indicated for the symptomatic relief of mild to moderate pain and inflammation associated with:

- Low backache, sprain and strain
- Blunt trauma of the tendons, ligaments, muscles and joints
-

4.2 *Posology and method of administration*

Dynapar QPS is for external use only and not to be administered orally. It should not be applied on any mucosa, open wound, cut or diseased skin.

Patient should be advised to ensure that the site of application is clean and dry before applying DYNAPAR QPS. Before using DYNAPAR QPS for the first time, prime the pump by spraying it into the air 2-3 times. On the affected area, 4 pump strokes (0.4 ml equivalent to 16 mg of diclofenac sodium) should be applied 4 times a day at regular intervals. Number of the pump strokes to be applied may be higher or lower depending on the area to be treated. The maximum single dose of 10 pump strokes and the maximum daily dose of 40 pump strokes (4 ml equivalent to 160 mg of diclofenac sodium) should not be exceeded. It should be sprayed from a distance of 6-8 inches from the site of application.

DYNAPAR QPS is a non-aqueous solution, hence the spray pattern will not be like the spray pattern of aqueous solutions or aerosol sprays. The prime purpose of the spray system is to ensure accurate dosing with each metered dose spray, which delivers 0.1 ml of solution. After applying the required number of sprays, spread the solution gently with your finger tip. Patient should be instructed not to massage the treated area after application. Patient should be advised to avoid washing or contact of treated area with clothes or other objects for 8-10 minutes after application.

It is recommended that lowest effective dose for shortest duration should be used. The treatment may be discontinued when the symptoms (pain and/or swelling) have subsided. Patient should be instructed to consult doctor, if the pain and/or swelling do not improve or if they get worse within 7 days. When it is required for more than 7 days' patients should be advised to use as per recommended by doctor.

Use in Special Population:

Use in pregnancy: No data is available for use of DYNAPAR QPS in pregnant women. Inhibition of prostaglandin synthesis may adversely affect the pregnancy and/or the embryo/foetal development. Data from epidemiological studies suggest an increased risk of miscarriage, cardiac malformation and gastroschisis after use of a prostaglandin synthesis inhibitor in early pregnancy. The absolute risk for cardiovascular malformation increased from less than 1% to approximately 1.5%. The risk increases with dose and duration of therapy. In animals, administration of a prostaglandin synthesis inhibitor has been found to increase pre- and post-implantation loss and embryo/foetal lethality. In addition, increased incidence of various malformations including cardiovascular have been reported in animals administered with prostaglandin synthesis inhibitor during organogenesis.

During the first and second trimester of pregnancy, DYNAPAR QPS should not be given unless the benefit outweighs the risk. If DYNAPAR QPS is used by a woman attempting to conceive, or during the first and second trimester of pregnancy, the dose should be kept low and duration of treatment as short as possible.

DYNAPAR QPS is contraindicated during the third trimester of pregnancy.

Use during Lactation: Like other NSAIDs, diclofenac passes into breast milk in small amounts. However, at therapeutic doses of DYNAPAR QPS no effects on the suckling child are anticipated. Because of a lack of controlled studies in lactating women, the product should only be used during lactation under advice from a healthcare professional. Under this circumstance, DYNAPAR QPS should not be applied on the breasts of nursing mothers, nor elsewhere on large areas of skin or for a prolonged period of time.

Paediatric population:

Pediatric Use: Use in pediatric population is not recommended as clinical study has not been conducted and safety has not been established. Data related to safety and efficacy is not available.

Geriatric Use:

No overall difference in effectiveness or safety is expected between elderly and younger patients, but because elderly patients are more likely to have decreased renal function, care should be taken when using DYNAPAR QPS in the elderly and it may be useful to monitor renal function. Clinical study has not been conducted and

4.3 Contraindication

- Hypersensitivity to diclofenac, acetylsalicylic acid or other non-steroidal anti-inflammatory drugs (NSAIDs)
- Patient with asthma or in patient, when attacks of asthma, urticaria or acute rhinitis are precipitated by acetylsalicylic acid or other NSAID.
- Children and adolescents less than 14 years.
- During the last trimester of pregnancy

4.4 Special warnings and precaution for use

- Contact of DYNAPAR QPS with eyes or mucous membrane should be avoided and it should not be ingested.
- DYNAPAR QPS is not recommended for use with occlusive dressing.
- Photosensitivity reactions have been reported with topical use of diclofenac. Patients should be warned against exposure to direct sunlight after application of DYNAPAR QPS.
- Discontinue the treatment if a skin rash develops after application.
- DYNAPAR QPS should be used cautiously with oral NSAIDs as the incidence of undesirable systemic effects may increase.
- DYNAPAR QPS should be used with caution in patients with a history of peptic ulcer, hepatic or renal insufficiency, bleeding diathesis or inflammatory bowel disease as isolated incidence of such cases with topical diclofenac have been reported.
- Do not mix or apply DYNAPAR QPS with any other topical agent.

Warning about excipients:

- Dynapar QPS contains 79.20 mg absolute alcohol (ethanol) in each ml of formulation which is equivalent to 10.00 % v/v. It may cause burning sensation on damaged skin.
- Dynapar QPS contains butylated hydroxyanisole and butylated hydroxytoluene which may cause local skin reactions (e.g. contact dermatitis), or irritation to the eyes and mucous membranes.

4.5 Interaction with other medicinal products and other forms of interaction

When used as per recommended dosage, the systemic availability of diclofenac from DYNAPAR QPS is very low as compared to oral formulation of Diclofenac. Hence the risk drug interactions with other oral medicinal products are reduced. Concurrent acetylsalicylic acid or other NSAIDs may result in an increased incidence of adverse reaction.

4.6 Fertility, pregnancy and lactation

Pregnancy:

No data is available for use of DYNAPAR QPS in pregnant women. Inhibition of prostaglandin synthesis may adversely affect the pregnancy and/or the embryo/foetal development. Data from epidemiological studies suggest an increased risk of miscarriage, cardiac malformation and gastroschisis after use of a prostaglandin synthesis inhibitor in early pregnancy. The absolute risk for cardiovascular malformation increased from less than 1% to approximately 1.5%. The risk increases with dose and duration of therapy. In animals, administration of a prostaglandin synthesis inhibitor has been found to increase pre- and post-implantation loss and embryo / foetal lethality. In addition, increased incidence of various malformations including cardiovascular have been reported in animals administered with prostaglandin synthesis inhibitor during organogenesis.

During the first and second trimester of pregnancy, DYNAPAR QPS should not be given unless the benefit outweighs the risk. If DYNAPAR QPS is used by a woman attempting to conceive, or during the first and second trimester of pregnancy, the dose should be kept low and duration of treatment as short as possible.

DYNAPAR QPS is contraindicated during the third trimester of pregnancy.

Lactation:

Like other NSAIDs, diclofenac passes into breast milk in small amounts. However, at therapeutic doses of DYNAPAR QPS no effects on the suckling child are anticipated. Because of a lack of controlled studies in lactating women, the product should only be used during lactation under advice from a healthcare professional. Under this circumstance, DYNAPAR QPS should not be applied on the breasts of nursing mothers, nor elsewhere on large areas of skin or for a prolonged period of time.

4.7 *Effects on ability to drive and use machines*

Not known

4.8 *Undesirable effects*

In phase III clinical trial of Dynapar QPS, no adverse event was reported. However topical application of diclofenac may be associated with local adverse effects at the site of application.

Skin: Local irritation, pruritus, rash, eczema, erythema (including in rare cases erythema bullosum), urticaria, contact dermatitis, contact dermatitis with vesicles, etc.

Isolated cases of generalised skin rash, hypersensitivity reactions such as angioedema, anaphylactic reactions and photosensitivity reactions have been reported in patients using topical NSAID preparations.

4.9 *Overdose*

The low systemic availability of diclofenac from DYNAPAR QPS makes overdose very unlikely. However, undesirable effects, similar to those observed following overdose of diclofenac tablets, can be expected if DYNAPAR QPS is inadvertently ingested. In the event of accidental ingestion, resulting in significant systemic adverse effects, general therapeutic measures, normally adopted to treat poisoning with non-steroidal anti-inflammatory medicines should be used.

Management of overdosage with NSAIDs essentially consists of supportive and symptomatic measures. Gastric decontamination and the use of activated charcoal should be considered. Supportive and symptomatic treatment should be given for complications such as hypotension, renal failure, convulsions, gastro-intestinal irritation, and respiratory depression; specific therapies such as forced diuresis, dialysis or haemoperfusion are probably of no help in eliminating NSAIDs due to their high rate of protein binding and extensive metabolism.

5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group:
Diclofenac Diethylamine: NSAID

ATC code:
Diclofenac Diethylamine: M01AB05

5.1 *Pharmacodynamic properties*

Diclofenac inhibits the cyclooxygenase (COX) enzyme, an early component of the arachidonic acid cascade, resulting in the reduced formation of prostaglandins, thromboxanes and prostacylin. Diclofenac, the active component has anti-inflammatory, anti-nociceptive and antipyretic effects.

5.2 *Pharmacokinetic properties*

A study was conducted in 18 healthy male volunteers to evaluate pharmacokinetic parameters. 5 ml DYNAPAR QPS (200 mg of diclofenac) was applied over the back of volunteers. The maximum plasma concentration of diclofenac was 175.93 ± 89.49 ng/ml while time to reach maximum plasma concentration was 5.24 ± 2.59 hours. AUC_{0-t} was found to be 1224.19 ± 445.69 hr.ng/ml while AUC_{0-inf} was 1718.21 ± 740.58 hr.ng/ml.

Distribution: Diclofenac is more than 99% bound to human serum proteins, primarily to albumin. Diclofenac diffuses into and out of the synovial fluid.

Metabolism: The major diclofenac metabolite, 4'-hydroxy-diclofenac, has very weak pharmacological action. The formation of 4'-hydroxy diclofenac is primarily mediated by CYP2C9. Both diclofenac and its metabolites undergo glucuronidation or sulfation followed by biliary excretion. CYP3A4 is responsible for the formation of minor metabolites, 5-hydroxy and 3'-hydroxy- diclofenac.

Elimination: Diclofenac is eliminated through 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.

5.3 *Preclinical safety data*

Published animal studies have shown that when given orally, the principal adverse effect is on the gastrointestinal tract. Diclofenac inhibited ovulation in the rabbit and impaired implantation, as well as early embryonic development in the rat. The embryo/foeto-toxic potential of diclofenac was evaluated in three animal species (rat, mouse and rabbit). Foetal death and growth retardation occurred at maternal toxic doses, however, on the basis of the available data, diclofenac is not considered to be teratogenic. The gestation period and the duration of parturition were extended by diclofenac. Doses lower than maternal toxic ones did not affect the postnatal development. Results from extensive genotoxicity and carcinogenicity testing suggest that it is unlikely that diclofenac would pose a significant carcinogenic hazard to humans.

6. PHARMACEUTICAL PARTICULARS

6.1 *List of excipients*

1. Propylene Glycol
 2. Glycerol
 3. Absolute Alcohol (Ethanol)
 4. Butylatedhydroxyanisole
 5. Butylatedhydroxytoluene
 6. Menthol
- Oleic acid

6.2 ***Incompatibilities***

Do not mix or apply it with any other topically applied medicine or any herbal preparations.

6.3 ***Shelf life***

24 months

6.4 ***Special precautions for storage***

Store below 30°C, protected from light. Keep out of reach of children. Keep the bottle in upright position.

6.5 ***Nature and contents of container***

- a) **Dynapar QPS 30 ml:**
- b) Clear colourless to yellow coloured solution filled in 30ml frosted cobalt blue moulded vial and sealed with spray pump crimp covered with pump ring and actuator.
- c)
- d) **Dynapar QPS 15 ml:**
- e) Clear colourless to yellow coloured solution filled in 20ml frosted cobalt blue moulded vial and sealed with spray pump crimp covered with pump ring and actuator.

6.6 ***Special precautions for disposal and other handling***

No special requirements

7. **MARKETING AUTHORIZATION HOLDER AND MANUFACTURING SITE ADDRESSES**

Marketing Authorization Holder

Troikaa Pharmaceuticals Limited
Commerce House-1, Satya Marg, Bodakdev, Ahmedabad - 380054, Gujarat, **India**.
Phone No.: +91-79-26856242/43/44/45
Fax No.: +91-79-26856246

Manufacturing Site Address

Troikaa Pharmaceuticals Limited,
Block No. 2019, 2022, 2023,
Village Virochannagar, Tal-Sanand,
City: Ahmedabad, Dist: Ahmedabad-382 170,
Gujarat State, **India**.

8. **MARKETING AUTHORIZATION NUMBER**

TAN 22 HM 0109

9. **DATE OF FIRST <REGISTRATION> / RENEWAL OF THE <REGISTRATION>**

11/04/2022

10. DATE OF REVISION OF THE TEXT