PACKAGE LEAFLET:
Information for the patient

NALIDIKSINE

Tablets – 500 mg
(Nalidixic acid)

Read all of this leaflet carefully before you start taking this medicine.
- Keep this leaflet. You may need to read it again.
- If you have any further question, ask your doctor or pharmacist.
- This medication has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor or pharmacist. This includes any possible side effects not listed in this leaflet.

In this leaflet:

1. WHAT NALIDIKSINE IS AND WHAT IT IS USED FOR

Nalidiksine contains the active substance nalidixic acid.
Nalidixic acid is considered to act by interfering with the replication of bacterial DNA, by inhibiting DNA-gyrase (topoisomerase) activity of the DNA. Nalidixic acid is active against gram - negative bacteria including: Escherichia coli, some strains of Klebsiella, some strains of Proteus, some strains of Enterobacter, some strains of Salmonella and some strains of Shigella. It is usually bactericidal. The greatest part of the sensitive microorganisms are inhibited by 16 mcg / ml or by lower concentrations.
Pseudomonas aeruginosa, gram-positive bacteria and anaerobes are not generally susceptible from nalidixic acid.
Bacterial resistance may develop rapidly, sometimes within a few days after the beginning of treatment.
Cross - resistance occurs with oxolinic acid and cinoxacin.
The antibacterial activity of nalidixic acid is not significantly affected by differences in urinary pH. Nalidixic acid is rapidly and almost completely absorbed by the gastrointestinal tract. The plasma concentration of 20 to 50 mcg per ml is achieved 2 hours after 1 g of oral dose. Plasma half-life is about 1 to 2.5 hours. Nalidixic acid is partially metabolized to hydroxynalidixic acid which has antibacterial activity similar to that of nalidixic acid.
About 93% of nalidixic acid and 63% of hydroxynalidixic acid are bound to plasma proteins. Both nalidixic acid and hydroxynalidixic acid are rapidly metabolised to inactive glucuronide and dicarboxylic acid derivatives. The major inactive metabolite, 7-carboxynalidixic acid, is usually only detected in urine.
Nalidixic acid and its metabolites are excreted rapidly in urine, nearly all of a dose is being eliminated within 24 hours. About 80% to 90% of the drug excreted in urine is in the form of inactive metabolites. Traces of nalidixic acid are found in breast-milk and it appears to cross the placenta. About 4% of a dose of nalidixic acid is excreted in the faeces.
Nalidiksine is indicated in:
- the treatment of acute and chronic infections, especially those of the urinary tract, caused from gram-negative bacteria (except different types of Pseudomonas), sensitive from nalidixic acid;
- the treatment of special cases of gastrointestinal infections caused from gram-negative bacteria sensitive from nalidixic acid (bacterial diarrhoea).

Your doctor may have given Nalidiksine for a different purpose. Ask your doctor if you want to know why you have been given Nalidiksine.

2. BEFORE YOU TAKE NALIDIKSINE

Do not take Nalidiksine if:
- you are hypersensitive (allergic) to nalidixic acid or to any of the other ingredients of the tablet;
- you are hypersensitive from components similar with nalidixic acid;
- you have had previous convulsive disorders;
- you suffer from porphyria;
- you have history of tendon injury related with the use of quinolones;
- you have severe renal damage.

It must not be used in children younger than 3 months. The use is also not recommended in other pediatric ages up to 18 years (see section "Take special care with Nalidiksine").
If you think you have any of the conditions mentioned above, talk to your doctor and follow the given advices.

Take special care with Nalidiksine
Ask your doctor for advice before taking Nalidiksine.
- Patients who are being treated with this drug must avoid excessive exposure in the sun.
- Nalidixic acid should be used with caution in patients with liver disease because it is mainly metabolized in this organ.
- Nalidixic acid should be used with caution in patients with glucose-6-phosphate dehydrogenase (G6PD) deficiency.
- Nalidixic acid should be used with caution in patients who suffer from myasthenia gravis because it can exacerbate the conditions of the disease.
- It must be used with caution in patients with moderate renal impairment or who suffer from severe cerebral atherosclerosis.
- The treatment should be stopped if symptoms of neuropathy or arthralgia occur, or if tendon pain, inflammation or rupture occurs.
- This medicine must be used with caution in patient who have had a history of epilepsy or who have conditions which can lead in the showing of the convulsions.
- Nalidixic acid should be used with caution in patients who have electrolyte disturbances, cardiac problems (bradycardia, heart failure, symptomatic arrhythmia, have experienced myocardial infarction and in those who were born with or have a family history of QT interval prolongation).
- Nalidixic acid should be used with caution in patients who have a known allergic predisposition.
- During treatment for more than 2 weeks it is necessary to carry out periodic blood tests as well as tests for kidney and liver function.

Special care should be done during pregnancy, especially during the first trimester and during breast-feeding.
It is recommended to minimize the use of the drug in children and adolescents up to 18 years. It can be used only in cases where it is really required.

Taking other medicines
Concomitant treatment with other medicines may affect or be affected by Nalidiksine.
Please tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines, including medicines obtained without a prescription.
Do not forget to inform your doctor for the treatment with Nalidiksine if you receive any other medicine during treatment.
Nalidiksine interacts with the following medicines:
- oral anticoagulants: nalidixic acid increases the effect of oral anticoagulants e.g. warfarin, so the dose of anticoagulants should be reduced;
- nitrofurantoin, chloramphenicol, tetracycline: nalidixic acid and the above-mentioned drugs are in-vitro antagonists and should not be used together;
- melphalan: the use at the same time of nalidixic acid and melphalan has caused serious gastrointestinal poisoning;
- drugs that cause QT interval prolongation;
- cyclosporine: the risk for neurotoxicity increases;
- probenecid: this drug reduces the excretion and increases the plasmatic concentration of nalidixic acid;
- theophylline, aminophylline: the risk of occurrence of convulsions increases;
- nonsteroidal anti-inflammatory drugs: the risk of occurrence of convulsions increases;
- glucocorticoids: the concomitant treatment increases the risk for tendon rupture;
- artemether with lumefantrine: should not be used at the same time with nalidixic acid.

The absorption of nalidixic acid is reduced from sucralfate and two- and three- valent cations such as: aluminum, calcium, iron, magnesium, zinc, therefore the use of this drug with antacids, iron preparations or other preparations which contain these cations as active substance or excipient, may lead in sub-therapeutic drug concentrations in the blood. It is recommended that these products should be taken 2 hours before or 2 hours after nalidixic acid.
It may give false-positive reaction of the test of glucose in urine when the method of copper reduction is used.

Taking Nalidiksine with food and drinks
The tablets should be swallowed with at least half glass of water and should be taken on an empty stomach, preferably one hour before meals.

Pregnancy
Seek the advice of your pharmacist or doctor before you take this medicine!
It is recommended the avoidance of Nalidiksine use during pregnancy.
Special care should be done during the first trimester of pregnancy, it should be used only if the doctor thinks it is necessary and the risk/benefit ratio is measured.
Therefore, always consult your doctor before using Nalidiksine during pregnancy.

Breast-feeding
Nalidixic acid is excreted into breast milk, therefore it should be avoided during breast-feeding.

Driving and using machinery
Nalidiksine can cause drowsiness, which may affect the patient's ability to drive or work with machinery.

3. HOW TO TAKE NALIDIKSINE

Always take Nalidiksine according to medical advice. You should check with your doctor or pharmacist if you are not sure. If you feel that the effects of Nalidiksine are too strong or too weak, talk to your doctor or pharmacist. The tablets should be swallowed with at least half glass of water and should be taken on an empty stomach, preferably one hour before meals.

Adults:
The initial treatment (in acute infections): 1 g, every 6 hours, for 1 to 2 weeks.
Prolonged treatment (in chronic infections): 1 g, every 12 hours, after the initial treatment.
However, the dose may need to be increased or decreased. Your doctor will advise you according the circumstances.
The dose can be halved in patients with impaired renal function depending on the value of creatinine clearance and the medical opinion.

If you take more Nalidiksine
If you take more Nalidiksine than you should, or if the children have accidentally taken this drug, please contact your doctor, the hospital, or call the emergency to get an opinion on the risk and advice on the actions that should be taken.

If you forget to take Nalidiksine
If you forget a dose (or more doses), take the next dose when it is the usual time to take it. Do not take a double dose (or higher doses) to make up for a forgotten dose (doses)!
If you have other questions for the use of this product, ask your doctor or pharmacist.

4. POSSIBLE SIDE EFFECTS

Like all medicines, Nalidiksine can cause side effects, although not everyone gets them. Sometimes they are serious, most of the time not. Do not be alarmed by this list of possible side effects. You may not get any of them.
The possible side effects caused from nalidixic acid are:
- **in central nervous system:** somnolence, weakness, headache, dizziness, intracranial hypertension, depression, confusion, hallucinations, peripheral neuropathy, cranial nerves paralysis;

when used in high doses, toxic psychosis and short convulsions may appear;
- **in gastrointestinal tract:** abdominal pain, nausea, vomiting, diarrhoea;
- **in muscles:** myalgia, muscular weakness, arthralgia, tendon rupture or inflammation;
- **allergic reactions:** exanthema, itching, hives, angiooedema and in rare cases anaphylactic reactions;
- **in the skin:** photosensitivity reactions have been reported, paresthesia, erythema and bullous eruption, allergic rash, pruritus and other more serious conditions like erythema multiforme, toxic epidermal necrolysis and Stevens-Johnson Syndrome;
- **in the heart:** this drug may trigger QT interval prolongation;
- **in blood:** thrombocytopenia, leukopenia, eosinophilia or hemolytic anemia in patients with or without glucose - 6 - phosphate dehydrogenase deficiency;
- **in hepato-biliary system and metabolism:** metabolic acidosis, cholestatic jaundice and cholestasis;
- **in the eye:** sight disorders.

If any of the side effects gets worse, or if you notice any side effects not listed in this leaflet, please inform your doctor or pharmacist.

5. HOW TO STORE NALIDIKSINE

Keep this medicine out of the sight and reach of children!
Do not use Nalidiksine after the expiry date which is stated on the pack.
Do not store above 25°C!
Keep in the original packaging to protect it from light and humidity!

6. FURTHER INFORMATION

What Nalidiksine - Tablets contain
The active substance is nalidixic acid.
Each tablet contains 500 mg nalidixic acid.
The other excipients are: maize starch, purified talc, gelatin, colloidal anhydrous silica, magnesium stearate, croscarmellose sodium, sodium starch glycolate.

Content of the pack
Box with 30 tablets.

Explanatory of the illustration icons on the packaging:

According to medical prescription.

Content. Warning.

Tablet shape.

Marketing Authorisation (MAH) Holder and Manufacturer:

PROFARMA Sh.a.
Rruga "Myslym Keta"
Tel.: 00355 4 23 89 602
Tirana - ALBANIA

This leaflet was last revised in June 2012.

SPECIFICATION

CROPING AREA 15 X 25 cm

PAY ATENTION, all the layers are visible. If you have to print this document please check or uncheck the specific layers.