ميروفلوكساسين هائية روكلو رائد خوراك: (بالغان) * عامطور برزیادہ افسکشن میں ۲۵۰ ہے بید ۲۵ ملی گرام دن میں دومرتبہ کے سے ۱۶ دن کے لیے -* مذکور اور بروسائٹیس کی شدید مار ان انفیکشن میں ••• ملی گرام دن میں دومرتیہ ۴ سے ۲ ہفتہ کیلئے ۔ * عام انفیکشن میں ۴۵ ملی گرا کا دن میں دومر تبہ ۔ * بیشاب کے نظام میں چید دافیکشن میں ۴۵۰ے • ۵۰ ملی گرام دن میں دومر تبہ ۔ * نظام تنفس کی انفیکشن میں• ۲۵ سے•• ۵ ملی گرام دن میں دوم تنہ ۔ پہ پیچیش میں ••۵ ملی گرام دن میں دوم سے ۔ * حدورجهافیکشن میں•۵ کے ملی گرام دن میں دومرتبہ ۔ * سرجری میں نفیشن سے جاؤ کیلئے ۵۰ علی گرام کی ایک خوراک آپریشن سے اسے ۲ اگھنٹہ پہلے ۔ اختباط: لردے اورجگر کی محدود کارکردگی کی صورت میں کریٹینائن کا نکاس <۲۰ ملی لیٹر /متیٹ سیرم کرشینائن >۳ ملی گرام/و والی لیٹر کے حساب سے مکمنہ جدتک سیر دفلو کساسین کے خون میں ارتکاز کی سطح کو جانچنا ضرور ی ہے۔ ممانعة بين **میروفلوکساسین** کے کری ہڈی برضر ررسال اثر ات کے امکانات کی دجہ ہے بچوں ، بڑھتے ہوئے نونہالوں ، حاملہ ادر دود پانے والی عورتوں میں تجویز نہیں کرنی جاہے۔ تاہم بچوں میں نا گزیر چالات میں ۵۰ کا گرام ہے ۵ ملی گرام فی کلوگرام بلحاظ وزن دن میں دومر تبہ تک دے سکتے ہیں۔ بدایات: * داکتری بدایت کے مطابق استعال کریں۔ * دواکو شعندی اور خشک جگر پر رکھیں۔ * دوالوگری، رشنی اور بی میشین مفوظ رکیس ۔ * تمام دوائل بجوں کی چینچ سے دور رکیس ۔ پیشکش : مىت پرول ۲۵۰ فلم كور گوليان (۱×۱۷) بلسٹريك ميں دستياب بين-ىيىپ يول... 6 فلم كۈنڈ كوليان (١×١٠) بلسٹر تيک ميں دستياب ہيں۔ Manufactured by: Schazoo Zaka (Pvt) Ltd. Kalalwala, 20-Km Lahore-Jaranwala Road, Distt: Sheikhupura, Pakistan,

Cipro

Ciprofloxacin Hydrochloride U.S.P.

Broad spectrum high performance DNA-gyrase inhibitor

COMPOSITION:

CLINICAL PHARMACOLOGY:

Ciprofloxacin is a broad spectrum DNA-gyrase inhibitor, a fourth generation fluoroquinolone derivative having strong bactericidal activity against variety of multi-resistant gram-positive and gram-negative pathogens including periodlin and methicillin resistant strains. The absolute bioavailability is 70-80% and high attainable concentrations at the target site i.e. tissues and body fluids within 1-1.5 hours after oral administration of single dose. The elimination half life is approximately 4 hours, 40-50 % is excreted in urine unchanged with renal clearance 300 ml/min, 1-2 % in bile as metabolites & 20-35 % is recovered in feces within 5 days. In susceptible micro-organisms it prevents bacterial chromosomal transcription by inhibiting a critical enzyme catalyst DNA-gyrase resulting in a total "Black-out" in bacterial cell chemistry, metabolic cessation with rapid decrease in bacterial growth and multiplication processes.

ANTI-MICROBIAL ACTIVITY:

Ciprofloxacin has strong in-vitro activity against most strains of gram-negative and grampositive aerobic and anaerobic bacteria. Due to specific mode of action it does not generally exhibit parallel resistance to any other group of antibiotics for instance penicilling, explalospoins, aminoglycosides and tetracyclines etc. Therefore, Ciprofloxacin is highly effective against bacteria resistant to these drugs and against the following micro-organisms; Gram-negative

Gram-negative		
Aeromonas spp.	Acinetobacter spp. Campylobacter jejuni	Branhamella catarrahalis
Campylobacter coli	Campylobacter jejuni	Chlamydia spp.
Citrobacter spp.	Edwardsiella tarda	Enterobacter spp.
Escherichia coli	Haemophilus spp.	Hafnia alvei
Klebsiella spp.	Legionella spp.	Moraxella spp.
Morganella morganii	Neisseria spp.	Pasturella multocida
Plesiomonas shigelloides	Proteus spp. (indole+)	Providencia spp.
Pseudomonas aeruginosa	Salmonella spp.	Serratia spp.
Shigella spp.	Vibrio spp.	Yersinia spp.
Gram-positive		
Brucella melitensis	Corynebacterium spp.	Listeria monocytogenes
Staphylococcus spp.	Streptococcus agalactiae	
The following micro-organisms are	e sensitive in varying degree;	
Gram-negative		
Alcaligenes spp.	Flavobacterium spp.	Gardnerella spp.
Mycobacterium fortuitum	Mycobacterium tuberculosis	Mycoplasma hominis
Gram-positive		
Streptococcus faecalis	Streptococcus pneumonia	Streptococcus pyogenes
Streptococcus viridans	- *	

INDICATIONS:

Ciprol is indicated in acute, chronic and recurrent infections caused by the susceptible strains of micro-organisms in the following pathological conditions;

Severe systemic infections --- Septicaemia, bacteraemia, peritonitis, infections or imminent risk of infections in immunocompromised patients with neutropenia or solid tumours and with selective intestinal decontamination in patients treated with immunosupressants and in infected burn cases.

Respiratory tract infections--- Lobar and bronchopneumonia, acute and chronic bronchitis. acute exacerbation of cystic fibrosis, bronchiectasis, empyma and as an advisable treatment for gram-negative pneumonia.

Ear, nose and throat infections --- Otitis media, sinusitis and mastoiditis especially if these are caused by gram-negative bacteria including Pseudomonas aeruginosa and Staphylococcus aureas. Urinary tract infections --- Uncomplicated and complicated urethritis, cystitis, polynephritis, prostatitis and epididymitis.

Skin and soft tissues infections --- Infected ulcers, wound infections, abscesses, cellulitis, otitis externa, erysipelas and infected burns.

Gastro-intestinal infections --- Enteric fever, infectious diarrhoea and as prophylactic against infection in elective upper gastro-intestinal surgery and endoscopic procedures where there is an increased risk of infection.

Eye --- Corneal ulcers and bacterial conjunctivitis.

Biliary tract infections --- Cholangitis, cholecystitis and empyma of gall bladder. Abdominal cavity infection --- Peritonitis and intra-abdominal abscesses. Bones and joint infections --- Osteomyelitis and septic arthritis.

Pelvic inféctions --- Salpingitis, endometritis and pelvic inflammatory disease. Reproductive organ infection --- Gonorrhoea including urethral, rectal and pharyngeal gonorrhoea caused by β-lactamase producing micro-organisms or organisms moderately sensitive to penicillin.

DOSAGE AND ADMINISTRATION:

The dosage is determined by the severity and type of infection, the sensitivity of the causative agent(s) and the age, weight and renal function of the patient. Where as the duration of treatment depends upon severity of infection, clinical response and bacteriological findings. The tablets should be taken with fresh water, preferably on an empty stomach.

Adults:

The dosage range for adults in majority of infections is 250-750 mg twice daily for 7-14 days. In acute & chronic osteomyelitis & prostatitis 500 mg twice a day for 4-6 weeks & should be In acute & clinic oscoling site is possible soon in twice a day for treated at least 3 days after the signs & symptoms have disappeared. In gonorrhoca, a single dose of 250 mg or 500 mg. In acute, uncomplicated cystitis, 250 mg twice daily.

In infections of lower and upper urinary tract 250-500 mg twice daily.

In respiratory tract infections, 250-750 mg twice daily.

In infected diarrhoea, 500 mg twice daily.

In cystic fibrosis, 750 mg twice daily,

In surgical prophylaxis, a single dose of 750 mg 60-90 minutes prior to surgery. Impaired renal function in patients with serum creatinine > 3 mg/100 ml and creatinine clearance < 20 ml/minute the dosage adjustment may be achieved by reducing the total daily dose by half.

Elderly : Patients should receive as low a dose as possible, taking into account the severity of the illness and the rate of creatinine clearance.

Adolescents and children: Due to risk of arthropathy the use of ciprofloxacin in children and growing adolescents is not recommended. However, where the benefit of using ciprofloxacin is considered to outweigh this potential risk, the dosage should be 7.5-15 mg/Kg/day depending upon the severity of infection, administered twice daily.

CONTRA-INDICATIONS:

The use of **Ciprol** is contra-indicated in patients with;

- A history of hypersensitivity to ciprofloxacin or other quinolone derivatives.
- Epilepsy or prone to convulsive seizure or other central nervous system complications including pre-existing central nervous system (CNS) lesions involving a lowered seizure threshold, after cerebro-cranial injuries, reduced cerebral blood flow due to severe cerebral arteriosclerosis, altered brain structure, stroke, inflammation or other factors which predispose to seizures.
- În children and growing adolescents except where the benefits of treatment exceed the risk.

PRECAUTIONS:

- Ciprofloxacin can impair patient's ability to drive or operate machinery, particularly in conjunction with alcohol
- Ciprofloxacin therapy requires well hydration and less alkalinity of the urine to avoid any possibility of crystalluria.
- Ciprofloxacin should be administered in combination with an appropriate antibiotic effective against anaerobes in case of suspected gastro-oesophageal obstructive lesions. - Ciprofloxacin or quinolones should be used with caution in patients genetically defficient
- in glucose-6-phosphate dehydrogenase which may lead to haemolytic reactions.
- Ciprofloxacin has been shown to cause arthropathy in immature animals and therefore its use during pregnancy and lactation is not recommended.

DRUG INTERACTIONS:

- Concurrent use of antacids containing magnesium or aluminium and iron therapy may interfere with the absorption of ciprofloxacin, resulting in serum and urine levels lower than the desired level.
- Ciprofloxacin may potentiate the effect of bronchodilator theophylline by elevation of plasma concentrations when administered concomitantly.
- Ciprofloxacin may prolong the bleeding time by augmenting the effect of anticoagulants.
- Simultaneous administration of quinolones and anti-diabetics may accentuate the hypoglycaemic effect of glibenclamide.
- Probenecid interferes with the renal tubular absorption of ciprofloxacin and produces an increase in the level of ciprofloxacin in serum.
- Concomitant use of ciprofloxacin and cyclosporin may lead to an increase in serum creatinine level.
- Animal study demonstrates that high doses of ciprofloxacin in combination with some non-steroidal anti-inflammatory drugs e.g. fenbufen but not acetylsalicylic acid can lead to convulsions.
- Opiate or regional anaesthetic agents are not administered concomitantly with ciprofloxacin when used for surgical prophylaxis.
- Prolonged use of ciprofloxacin may result in superinfections. Therefore, monitoring of patient condition and microbial susceptibility testing is essential during therapy.

SIDE EFFECTS:

Ciprofloxacin is generally well tolerated. The most frequently reported adverse reactions; GIT disturbances --- Nausea, vomiting, dyspepsia, diarrhoea, abdominal pain, anorexia, flatulence, dysphagia. Rarely pseudomembranous colitis.

CNS disturbances ---Headache, restlessness, dizziness, tremor, convulsions, confusion, hallucinations, somnolence, depression. Very rarely sleep disorders, anxiety and rise in intracranial vault pressure.

CVS disturbances --- Eosinophilia, leucopenia, thrombocytopenia, thrombocytosis, altered prothrombin level and tachycardia.

Skin disorders ----Rash, pruritus, urticaria, photosensitivity, drug induced fever, anaphylactoid reactions. Very rarely petechiae, haemorrhagic bullae, vasculitis, Stevens-Johnson and Lyell Syndrome.

Hepatic disturbances --- Transient increase in liver enzymes or serum billirubin (particularly in patients with previous liver damage), hepatitis, jaundice and hepatic necrosis. Renal disturbances --- Transient increase in blood urea or serum creatinine, renal failure. crystalluria and nephritis.

Musculoskeletal disturbances ---Arthralgia, myalgia and rarely tenosynovitis. Special sense disturbances --- Very rarely, visual disturbances, impaired taste and smell, tinnitus and transient impairement of hearing at high frequencies.

OVER DOSAGE:

Gastric lavage should be performed as soon as possible after ingestion of tablets. The serum levels of ciprofloxacin are reduced by dialysis.

STORAGE CONDITIONS:

- * Protect from heat, light and moisture. * Store in a cool and dry place.
- * Keep all medicines out of the reach of children.

PACKING :

Ciprol 250 mg film coated tablets are available in (1x10) blister pack. Ciprol 500 mg film coated tablets are available in (1x10) blister pack.