# HYDROOUINE

# **COMPOSITION**

Each film coated tablet contains 200mg Hydroxychloroquine sulphate.

### **PROPERTIES**

Hydroxychloroquine is primarily an anti-malarial agent with anti-inflammatory potentials.HCQ increases pH within intracellular vacuoles, and alters protein degradation by acidic hydrolases. It has several pharmacological actions; these include: interaction with sulphhydrill group interfering with enzyme NADH, cytochrome C reductase, choline esterase, protease and esterase. It binds DNA& stabilizes lyzosomes with subsequent inhibition of prostaglandin formation; polymorphonuclear cell chemotaxis and phagocytosis.It also interferes with interleukin 1 production& inhibits neutrophil superoxide release. It also interferes with antigen presentation by macrophages and other antigen-presenting cells. It is almost completely absorbed with wide tissue distribution, and is eliminated in urine.



# USES

Hydroxychloroquine is recommended for treatment of:

- 1. Rheumatoid arthritis 2. Juvenile chronic arthritis 3. Discoid and systemic lupus erythematosus 4. Photoprotective for photodermatoses and porphyria.
- 5. Treatment and prophylaxis of malaria.

# DOSAGE AND ADMINSTRATION A.ARTHRITIS AND RELATED DISORDERS

Hydroxychloroquine tablet are used only as disease modifying agent in rheumatoid arthritis, discoid and systemic lupus with delayed onset of action (more than 6weeks). Initially 400 mg are administered orally to adult and elderly in divided doses to be reduced to 200mg at maintenance; Maintenance should be achieved with the minimum effective dose that should not exceed 6.5mg/kg/day.

**CHILDREN**: Minimal effective dose should be employed and should not exceed 6.5mg/kg/day.



**ADULT**: A dose of 400mg every 7 days is used for prophylaxis. Wherase an initial dose of 800 mg is used for treatment followed after 6-8hours by 400mg and further 400mg on each of the two following days.

**CHILDREN**: Prophylaxis with weekly doses of 6.5mg/kg.Treatment should includes a loading dose of 13mg/kg followed by 6.5mg/kg 6hours later. For the two following days; a similar daily dose given.

## C.PHOTODERMATOSES

Treatment should be only given during periods of maximum exposure to light.

#### D.PROPHYRIA CUTANEA TARDA

Hydroxychloroquine 200mg is given twice weekly in patients unsuitable for phlebotomy.

#### **E.OTHERS**

The use of 800mg Hydroxychloroquine preoperatively and until ambulation has shown to reduce the incidence of fatal pulmonary embolism after total hip replacement.

#### CONTRAINDICATION

Hydroxychloroquine should not be used in patient with preexisting maculopathy. Should not be used during pregnancy.

## PRECAUTIONS

Patients should have an initial ophthalmologic examination to be repeated every 6months. Treatment should be discontinued at the event of pigmentary abnormality or visual field defects. The occurrence of retinopathy is uncommon if recommended dose is not exceeded. Altered visual accommodation has been recorded at start of therapy. Periodic blood counts are advised when treatment is prolonged.

#### INTERACTIONS

Hydroxychloroquine increases plasma digoxin level and may also be subjected to several of Known interaction to chloroquine, these include: Potenitiation of its direct blocking action at the neuromuscular junction by aminoglycosides.Inhibition of its metabolism by cimetidine resulting in increase of its plasma levels. By virtue of its immunomodulatory action, it reduces the antibody response to primary immunization with intradermal human diploid cell. Rabies vaccine. The use of antacids reduces its absorption and four –hour interval spacing should be considered when antacid are used.

## SIDE EFFECTS

# 1-Retinopathy - visual field defects

Occurs uncommonly with the recommended daily dose .it is reversible on discontinuation when detected early (if left to developed there may be a risk of progression even after during withdrawal).

# 2-Corneal opacities

3-Skin rashes and pigmentary changes

**4-Other adverse effects** include GI disturbance which resolve upon dose reduction, less frequently muscle weakness, vertigo, nervousness and headache .Rarely there have been reports of bone marrow depression.

**PACKAGING:** boxes of 20 tablets.

STORAGE CONDITION: Store below 30°C



