

Chloroquine

The antimalarial drug chloroquine is often used in conjunction with proguanil



GENERIC AND PROPRIETARY NAMES

- Chloroquine/chloroquine sulphate, Avloclor, Nivaquine.

ACTION

- The exact action of chloroquine is unclear, but it is thought to stop malaria parasites replicating within their host red blood cells.

CLASSIFICATION

- Antimalarial.

INDICATIONS

- Malaria prophylaxis.
- Rheumatoid arthritis.
- Lupus erythematosus.

CAUTIONS

- Pregnancy (in malaria, however, benefit outweighs risk).
- Renal impairment.
- Severe gastrointestinal problems.
- Neurological conditions (avoid use as prophylaxis if there is a history of epilepsy).
- Myasthenia gravis.
- Psoriasis can be exacerbated.
- Glucose-6-dehydrogenase deficiency.
- Long-term use can result in ophthalmic complications.
- Avoid using at the same time as hepatotoxic medication.

SIDE-EFFECTS

- Gastrointestinal disturbances.
- Headache.
- Skin reactions such as rashes and pruritis.
- Very toxic in overdose.
- Convulsions.
- Visual disturbances such as blurred vision and photophobia.
- Keratopathy.
- Ototoxicity.
- Depigmentation or loss of hair.
- Skin and nail discoloration.
- Discoloration of mucous membrane.
- Photophobia.

RARE SIDE-EFFECTS

- Hypersensitivity, including urticaria and angioedema.
- Blood disorders.
- Mental problems.
- Suppression of bone marrow.
- Myopathy.
- Exfoliative dermatitis.
- Stevens-Johnson syndrome.
- Photosensitivity.
- Hepatic damage.

INTERACTIONS

- Decreased action with magnesium, aluminium compounds and kaolin.
- Reduced oral clearance and metabolism with cimetidine.

ADMINISTRATION

- Tablets, liquid or injection.

NURSING CONSIDERATIONS

- Resistance has developed in certain parts of the world.
- Recommendations for malaria prophylaxis should be based on up-to-date research.
- Prophylaxis is not 100 per cent effective. It is important to inform travellers about mosquito bites and taking drug regularly.
- Rotate injection site.
- Orally, give same time each day to maintain levels.
- Ophthalmic tests required in long-term treatment.
- Observe for allergic reactions, such as pruritis, rash, urticaria.
- Observe for ototoxicity (tinnitus, vertigo, changes in hearing ability).
- Toxicity is a problem – observe for signs.

PATIENT TEACHING

- On return from malarial region patients should visit doctor if symptoms occur up to one year after return, but especially if within three months, mentioning their exposure to malaria.
- Sunglasses should be worn to decrease photophobia.
- Urine may become rust-coloured.
- Patient should report hearing or visual problems, fever, fatigue, excessive bruising or bleeding.

REFERENCES

Bradley, B., Bannister, D.G. (2004) *Update to Guidelines for Malaria Prevention in Travellers from the United Kingdom for 2003*. Available at: http://www.hpa.org.uk/infections/topics_az/malaria/pdf/further_update_guidelines.pdf

Mehta, D.K et al (eds) (2004) *British National Formulary*. London: BMA/Royal Pharmaceutical Society of Great Britain.

Nurses should refer to manufacturer's summary of product characteristics and to appropriate local guidelines