CYPROHEPTADINE

Introduction

Cyproheptadine is an antiserotonergic agent.

It also has some antihistamine and anticholinergic activity.

It may be used to help alleviate the symptoms of mild to moderate **serotonin syndrome.**

It *cannot* be considered a life saving antidote for *severe* cases of serotonin syndrome, (which requires intubation, muscle paralysis and mechanical ventilation).

See also separate Document on Serotonin Syndrome.

Preparation

Tablets: 4 mg.

Mechanism of Action

Cyproheptadine competitively inhibits the following receptors:

- Serotonin $5HT_{1a}$ and $5HT_{2}$
- Histamine H_1

It also has some mild peripheral anticholinergic activity.

Pharmacokinetics

Absorption:

- Cyproheptadine is well absorbed orally.
- Peak plasma levels occur within 1-3 hours.

Metabolism and excretion:

- Metabolism is via the liver

Indications

Symptom control in **mild** to **moderate** serotonin syndrome.

Cyproheptadine is not useful for the management of severe serotonin syndrome, (which requires intubation, muscle paralysis and mechanical ventilation).

Contra-indications / Precautions

Known hypersensitivity

Situations where anticholinergic effects would be detrimental, e.g. closed angle glaucoma, or bladder neck obstruction

Adverse Reactions

There are no significant adverse effects at usual therapeutic dosing.

Dosing

For serotonin syndrome:

The initial dose is **8 mg orally.**

If a response is seen, continue treatment with **8 mg** orally **every 8 hours** for **24 hours.**

Some resolution of symptoms should be seen within 2 hours of the initial dose.

Providing all serotonergic agents have been ceased therapy should not be required beyond 24 hours, unless symptoms have been caused by an irreversible MAO inhibitor.

Paediatric dosing is not well established, but the following has been suggested for 7-14 year olds: 4mg stat followed by 4mg every 8 hours for 24 hours.

References:

1. Cyproheptadine in: L Murray et al. Toxicology Handbook 3rd ed 2015.

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