NHS Greater Glasgow & Clyde Mental Health Services Prescribing Management Group

Prescribing notes: Propranolol for Anxiety

The β -blocker propranolol has been used as part of treatment of anxiety for many years. A couple of recent SCIs have identified it amongst a cocktail of other drugs used in completed suicides. There appears to be an impression that propranolol is an innocuous drug however all drugs have adverse effects and it is important that it is prescribed appropriately. This article summarises the licensed indications, cautions and side effects with regards to the use of propranolol to treat anxiety.

Indications and dosage:

Situational and generalised anxiety:

It is most useful for patients exhibiting somatic symptoms particularly tachycardia, sweating and tremor.

- Acute situational anxiety a dose of 40mg daily may provide short term relief.
- Generalised anxiety, requiring longer term therapy, usually responds adequately to 40mg twice daily which, in individual cases, may be increased to 40mg three times daily.
- Anxiety tachycardia a dose of 10mg to 40mg three to four times a day.

Treatment should be continued according to response. Patients should be reviewed after six to twelve months' treatment.

It is worth noting that the Psychotropic Drug Directory 2016 recommends a dose range of 20 – 60mg daily.

If using modified release preparations a dose of 80mg daily should adequately treat most patients and treatment should be reviewed after 6-12 month.

Side effects, cautions and contra-indications:

Common side effects from propranolol include fatigue, cold extremities, stomach upset, sleep disturbances (including nightmares), dizziness, wheeziness and bradycardia.

Propranolol should be used cautiously in people with severe hepatic or renal impairment, AV block, diabetes, thyroid disorders, Raynaud's disease or intermittent claudication.

The use of propranolol is contra-indicated in people with asthma, COPD, hypersensitivity to propranolol hydrochloride or to any of the excipients, cardiac decompensation which is not adequately treated, sick sinus syndrome/SA-block, metabolic acidosis, second and third-degree heart block, prolonged fasting (*eg* hypoglycaemia), cardiogenic shock, untreated phaeochromocytoma, severe bradycardia, severe hypotension, severe peripheral arterial disturbances and Prinzmetal's angina.

Propranolol is not a benign drug. If used to treat anxiety the lowest effective dose for the shortest period possible should be used. Treatment should be reviewed at least 6 monthly.

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