Prescribing Alert

NHS Lancashire and South Cumbria Integrated Care Board

LSC ICB Medicines Safety Committee

Approved: 28.01.2025

Topic

Potential under-recognised risk of harm from propranolol.

Background

This risk was previously flagged in 2021 but remains an ongoing area of risk.

Two recent Coroner's reports in December 2023 and November 2024 have highlighted the risks of harm from propranolol, in particular the risk of toxicity in overdose.

In 2020 the Healthcare Safety Investigation Branch (HSIB) issued an alert around the risk of harm from propranolol. In 2017, 52 deaths were recorded as linked to propranolol overdose, and in our local area we are aware of at least three deaths relating to propranolol.

Low-dose propranolol is licensed for use in physical somatic symptoms of anxiety, but NICE **does not** recommend propranolol for use in Generalised Anxiety Disorder and Social Anxiety Disorder (see NICE guidance CG113 and CG159) nor is there any recommendation in the BNF to use propranolol for the treatment of anxiety in isolation. For such indications considerations should be made for other options such as non-pharmacological support e.g. cognitive behavioural therapy (CBT).

The BNF does provide dose information for the treatment of anxiety with symptoms such as palpitations, sweating and tremor, reflecting the licensed dose for these indications.

There has been a steady rise in the number of propranolol prescriptions issued to NHS patients nationally.

A Prescqipp hot topics bulletin provides an overview of the HSIB report and makes recommendations on how to raise awareness on the risks to patients and to ensure they are reviewed. Note: you will need to log in or join the Prescqipp platform to access materials.

Localities affected

Lancashire (North, Central and East Lancashire), Blackpool, Blackburn with Darwen, South Cumbria.

Advice for General Practice

- Prescribers should consider the toxicity of prescribed medicines if a patient is deemed to be at risk of suicide.
- Prescribers should be aware that the symptoms of an overdose with propranolol and other beta blockers include light-headedness, dizziness, and fainting. Patients may have a slow heart rate and heart failure may be precipitated or exacerbated.
- Prescribers should risk assess any patients who are already on propranolol for anxiety for their risk of (accidental) overdose - PrescQIPP provide an audit, GP clinical system searches and a patient leaflet to support GP practices to review their patients. Prescribers should also review the continued suitability of propranolol treatment in patients with co-existing migraine, depression or anxiety - see HSIB report.
- If prescribing propranolol, use the lowest effective dose, review the quantity supplied (smaller quantities should be considered as a safety measure to safeguard patients) and review the patient regularly. Risk assess individual patients for risk of self-harm/overdose.
- Prescribers should only initiate propranolol in cases of situational anxiety where physical symptoms are the predominant feature (palpitations, sweating and tremor). To prompt regular review, propranolol should be added to 'acute' prescriptions only and reviewed in terms of efficacy.
- Ensure that patients are aware of the harms of propranolol in overdose and the steps they should take in cases of purposeful or accidental overdose. This information is contained in the products' patient information leaflet which explains what to do if a patient takes more tablets than they should.
- When reporting a suspected overdose to the emergency services – tell them the patient has taken propranolol as this can result in rapid deterioration before the ambulance arrives.
- Where propranolol is prescribed for any condition other than anxiety (e.g. migraine, thyrotoxicosis, tremor or arrhythmias), this may still not be appropriate if the patient is at risk of overdose.
- Prescribers should be mindful of drug-drug and drug-condition interactions with beta-blockers.
- Encourage patients to safely dispose of any propranolol tablets if they are no longer required, by returning them to a community pharmacy for destruction.
- ***Further information about risks of propranolol in overdose can be found at*** *TOXBASE - poisons information database.*
- ***The full Healthcare Safety Investigation Branch report can be viewed*** *here.*
- Please continue to report suspected adverse drug reactions to the Yellow Card scheme.
- Please continue to report medicines safety incidents into Ulysses.

Further Information: Please direct queries to your locality Medicines Optimisation teams.