

Clozapine and hypersalivation

The information in this document is not intended as a definitive treatment strategy, but as a suggested approach for clinicians. It is based on previous successful experience. Each case should, of course, be considered individually.

This information is provided for healthcare professionals and should not be used as a patient information leaflet.

Background

The Summary of Product Characteristics of Clozaril[®] (Clozapine) states that hypersalivation is a very common ($\geq 1/10$) side effect.^{1,2}

Hypersalivation may be defined as an abnormally increased secretion of saliva. It may also be referred to as sialorrhoea or ptyalism. An excess of saliva can lead to pooling in the mouth with subsequent drooling. Hypersalivation is more common at night.³

The incidence of clozapine-induced hypersalivation reported in the literature varies enormously from 10% up to as much as 80%,^{4,5} with several sources quoting incidences in the region of 30%.⁶⁻⁸

Clozapine-induced hypersalivation tends to occur early in treatment⁸ and although some patients may develop tolerance to it, many do not and the problem can persist for years.⁸

Implications and complications of hypersalivation

Hypersalivation is an uncomfortable and embarrassing side-effect which may be a significant cause of non-compliance and discontinuation of clozapine.⁹

It may cause social stigma, disturbed sleep, aspiration, parotitis, maceration and infection of the skin, poor hygiene and a reduced quality of life.⁹ Since each swallow allows some air into the gastrointestinal tract, increased swallowing may result in bloating, pain and flatus.¹⁰

Aspiration is the most serious consequence of hypersalivation as it may lead to coughing, hoarseness, difficulty speaking, choking, bronchitis or pneumonia.^{10,11}

Is clozapine-induced hypersalivation dose-related?

Although hypersalivation in some patients may be improved by dose reduction it is not necessarily dose-related.^{12,13}

Reinstein *et al*¹³ reviewed 1000 clozapine patients to identify those with adverse effects and then reduced clozapine dose while adding quetiapine. Hypersalivation reduced from 31% to 16%.

As with many other side-effects of clozapine, using a slow dose titration on initiation of treatment and using the lowest effective dose may minimise clozapine-induced hypersalivation.¹⁴

Management

Consider checking the patient's plasma level to see whether a dose reduction may be appropriate. Cautious dose reduction may be possible for stable patients with an adequate plasma level although the risk of exacerbating psychosis must be taken into account.

As patients commonly experience hypersalivation at night, it can be helpful to use towels over the pillows. Using extra pillows to prop up the head can reduce the amount of saliva produced as it may be posture-related.⁶

Nocturnal hypersalivation can lead to a choking sensation which may be helped by patient education regarding swallowing difficulties. Swallowing two or three times without inhaling (by compression of the nostrils) can reduce the sensation of choking.¹⁵

Advising patients to swallow more frequently may be helpful⁴ and during the daytime this can be encouraged by chewing gum¹⁶ which can help to prevent drooling. Sugar free gum should be used to prevent dental decay and reduce sugar intake.

If hypersalivation is a persistent problem (despite dose review, daytime use of chewing gum and/or extra pillows at night), pharmacological intervention may be necessary. Please refer to your local hospital trust guidelines on effective drug management of hypersalivation.

References

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Adverse events should be reported.

For the UK, reporting forms and information can be found at www.mhra.gov.uk/yellowcard.

For Ireland, report adverse events via HPRC Pharmacovigilance medsafety@hpra.ie.

Adverse events should also be reported to Mylan via cpms@mylan.co.uk