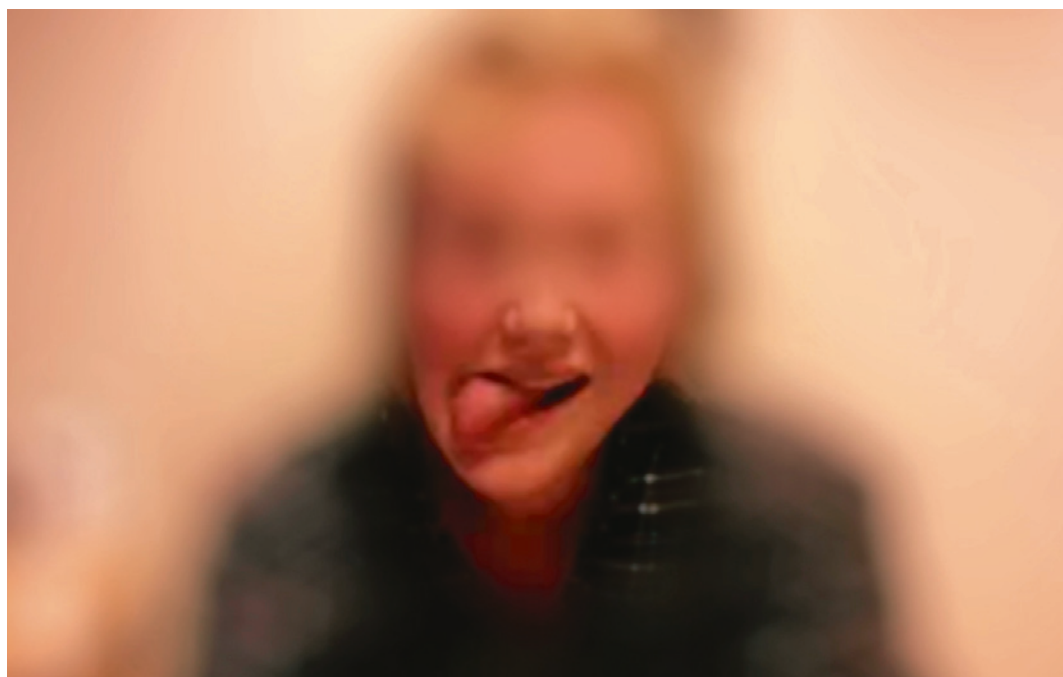


# Dystonia induced by drug treatment



Dystonia is a movement disorder that is characterised by intermittent or prolonged muscle contractions that result in abnormal, often repetitive movement patterns in all or parts of the body (1). Dystonia is a neurological symptom, for which there may be various causes. A distinction is made between primary and secondary dystonia. Dystonia induced by drug treatment is an example of a secondary form of the disorder.

Metoclopramide (Afipran) is frequently used to treat nausea and vomiting, both in hospitals and in general practice. Its anti-nauseant effect is symptomatic and attributable to direct inhibition of the chemoreceptor trigger zone and area postrema in the medulla oblongata by blocking dopamine receptors. Acute dystonic reactions are caused by unwanted blockade of dopamine receptors (D2 receptors) in the basal ganglia (2). Extrapyramidal side effects are estimated to be 0.2%. Acute dystonic side effects usually occur 1–2 days after first taking the drug (3).

A woman in her early twenties attended the accident and emergency department following an acute onset of involuntary movements of the tongue and jaw – see photo and video. She had been prescribed metoclopramide by her GP due to stomach pains, vomiting and diarrhoea. She had taken a total of four tablets (40 mg) over a period of approximately 24 hours, which is higher than the recommended dosage (4). The onset of sym-

ptoms occurred two hours after taking the last tablet, and began with discomfort in the tongue and jaw area, involuntary stretching movement of the tongue, and deviation of the jaw to the right. The patient managed to move her tongue, but she felt that it wanted to stretch itself forward in the resting position. The video illustrates extrapyramidal side effects of dystonia in the tongue and lower jaw. The patient was given 5 mg biperiden (Akineton) intravenously with rapid effect.

Acute extrapyramidal side effects after using metoclopramide are harmless and reversible, but undoubtedly a dramatic and unpleasant experience for patients. It is essential to be aware that the condition is frequently induced by drug treatment, and that drugs that inhibit dopamine receptors, including anti-nauseants and antipsychotics, can produce this type of adverse effect. Anticholinergic drugs can relieve symptoms, but the extrapyramidal side effects generally disappear rapidly by themselves provided treatment is stopped.

*The patient has consented to the publication of this article and video.*

**Marianne Solberg**

*marso2@vestreviken.no*

**Jeanette Koht**

Department of Neurology  
Drammen Hospital

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Marianne Solberg (born 1980), specialty registrar. The author has completed the ICMJE form and reports no conflicts of interest.

Jeanette Koht (born 1969), researcher, specialist in neurology and senior consultant. The author has completed the ICMJE form and reports no conflicts of interest.

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