Deprescribing of psychotropic medication in a 30-year-old man with learning disability

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Received 13 July 2016

Revised 2 September 2016

Accepted 19 September 2016

EAHP Statement 4: Clinical Pharmacy Services

ABSTRACT

A 30-year-old man with learning disability, living in a residential home with no documented mental health diagnosis, on the autistic spectrum was prescribed carbamazepine, olanzapine and propranolol to manage behaviour on a long-term basis. He was able to successfully discontinue both of his psychotropic medicines. The reduction was carried out in the community under the supervision of the learning disability psychiatrist. He is less tired, more alert and better able to express himself. He has expanded his activities and increased his access to the community. He is able to cope better with changes to his routine. His behaviours are well managed by the behavioural strategies in place and he has now been discharged by the psychiatrist to the general practitioner.

Public Health England's report on the prescribing of psychotropic drugs to people with learning disability (PwLD) and/or autism by general practitioners (GPs) in England discovered that nearly one-third of all adults known to have a learning disability were receiving one or more psychotropic drugs, and over half of these people do not have a mental health diagnosis documented in their clinical notes.¹ In addition, studies commissioned by NHS England found that these medicines are commonly prescribed without adequate monitoring or review.²

This, together with further evidence from Sheehan *et al*³ of high prescribing rates of psychotropic medication in PwLD, has led to NHS England issuing a 'call to action'.⁴ The process began in July 2015 and involves carers, relatives and professionals as well as PwLD. The aim is to reduce the inappropriate prescribing of psychotropic medication to PwLD where they have been prescribed to contain and manage behaviour. Psychotropic medication may need to be prescribed if there is a clear indication and an underlying mental illness.

There are no psychotropic medicines licensed for use in management of behaviour in adults, so these medicines are being used off label with the potential for harm from short- and long-term side effects without good evidence of efficacy. However, National Institute of Health and Care Excellence (NICE) NG11 'Challenging behaviour and learning disabilities: prevention and interventions for people with learning disabilities whose behaviour challenges' does define a role for such medicines.

NICE NG11 (2015) advises that the prescribing of antipsychotic medication should only be considered if psychological interventions have not been effective in an agreed time period and there is severe risk to the patient and other people. NICE also

advises 'if antipsychotic medication is prescribed then it should initially be prescribed and monitored by a specialist who should decide on how to measure effectiveness, monitor side effects, review side effects and effectiveness after 3–4 weeks, stop after 6 weeks if no evidence of response and document reason for prescribing, length of treatment and strategy for reviewing medication'.⁵

This case study was part of the NHS Improving Quality Winterbourne Medicines Programme, commissioned by NHS England. Hertfordshire Partnership University NHS Foundation Trust was one of six sites chosen for this project.²

It is an example of a PwLD prescribed psychotropic medication on a long-term basis for the management of behaviour that challenges. The case demonstrates that this medication can be successfully stopped. Any reduction that is attempted should be carried out cautiously and slowly to pre-empt any discontinuation symptoms that may emerge following a rapid reduction. In the case of polypharmacy, it is prudent not to make too many changes simultaneously and to target one psychotropic medication at a time.

CASE PRESENTATION

Patient: AB

Age: 30 years. Gender: Male. Height: 5ft7in.

Weight: June 2013: 82 kg, BMI 28.3.

Weight: July 2015: 56 kg, BMI 19.3.

BMI range: 18.5–25.

Diagnosis: F70.1, mild learning disability with impairment of behaviour; F84, pervasive developmental disorder.

Allergies: None known.

Social circumstances: Residential care and has 14.5 hours one-to-one support every day.

Psychiatric history: Behaviour that challenges.

Medical diagnoses: Jan 2013: overweight (82 kg).

Medication history:

Olanzapine, prescribed as an antipsychotic to control behaviour that challenges;

Carbamazepine, prescribed as a mood stabiliser to control behaviour that challenges;

Propranolol, prescribed as a beta blocker to treat the somatic symptoms of anxiety;

No other prescribed medication;

No over the counter medication;

No complementary medicines.

Pharmaceutical problems: Olanzapine and carbamazepine being prescribed off label. Weight gain and sedation are common adverse effects of both olanzapine and carbamazepine. AB appeared to be affected by these two adverse effects.

Olanzapine may increase plasma carbamazepine levels, increasing the risk of side effects from carbamazepine—for example, dizziness, drowsiness.

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To cite: Adams D, Sawhney I. *Eur J Hosp Pharm* 2017;24:63–64.

Olanzapine is associated with the development of metabolic syndrome increasing the risk of diabetes and cardiovascular disease.

Bone health can be affected by the long-term prescribing of anticonvulsants such as carbamazepine and hyperprolactinaemia caused by antipsychotic drugs such as olanzapine.

Medication reduction: AB was commenced on olanzapine in 2005. He has been on carbamazepine since 2007. There was no indication for both the medications, as there was no diagnosable mental illness and they had been initiated to manage his behaviour. He was prescribed 10 mg olanzapine and 800 mg carbamazepine. Staff kept the medication safely in the office. Medication was laid out for AB and he self-administered with staff support. He successfully came off both of these medicines gradually in a planned way. The reduction was performed by his consultant psychiatrist in the community. The olanzapine was discontinued successfully in April 2013. The carbamazepine was stopped in September 2014. In August 2015, propranolol 20 mg BD was reduced to 10 mg OD, reduction to continue by the general practitioner.

OUTCOME AND FOLLOW-UP

The patient was able to successfully discontinue both the olanzapine and the carbamazepine, which had been prescribed for behavioural problems as opposed to any underlying mental illness. He is less tired, more alert and better able to express himself. He has expanded his activities and increased his access to the community. He is able to cope better with changes to his routine. His behaviours are well managed by the behavioural strategies in place and he has now been discharged by the psychiatrist to the GP.

Over 2 years his weight decreased from 82 kg to 56 kg at the time of discharge from psychiatric services, which is within the recommended BMI.

His weight and behaviour will undergo continual monitoring by the community mental health team and the GP.

DISCUSSION

As with the majority of medicines, psychotropic medication is associated with both short- and long-term adverse effects. Olanzapine and carbamazepine are both associated with weight gain and sedation. Olanzapine is particularly associated with increased risk of metabolic syndrome, increasing the risk of diabetes and heart disease.⁶ Studies have demonstrated that PwLD have poorer health outcomes, poor access to health services and shorter life expectancy than the general population,^{7–9} therefore prescribing antipsychotics with a risk of metabolic syndrome may compound the risks.¹⁰ Increases in prolactin caused by olanzapine, together with the prescribing of an anticonvulsant, can affect bone health. Carbamazepine is an enzyme inducer and can cause significant drug interactions when other medicines are co-prescribed. Common side effects of carbamazepine include hyponatraemia, urticarial rashes, blurred vision and leucopenia.¹¹

Deprescribing is the process of identifying prescribed medicines that are potentially not appropriate, with the aim of withdrawing and stopping these medicines as part of a review. The reduction in adverse effects, drug interactions and the burden of taking many different medicines can benefit the patient.¹²

The 'Stopping Over-Medication of People with a Learning Disability' (STOMPLD) pledge was signed by the Royal Colleges of Nursing, Psychiatrists and General Practitioners, as well as the Royal Pharmaceutical Society, the British Psychological Society and NHS England in June 2016. The toolkit ([http://www.england.nhs.uk/wp-content/uploads/2016/06/stopping-over-](http://www.england.nhs.uk/wp-content/uploads/2016/06/stopping-over-medication.pdf)

[medication.pdf](http://www.england.nhs.uk/wp-content/uploads/2016/06/stopping-over-medication.pdf)) contains case studies of examples of withdrawing and reducing psychotropic medication in PwLD.

This case demonstrates that psychotropic drugs can be successfully stopped, but what we need now is more, evidence-based information on how to do this safely. Current polypharmacy guidance does not specifically address the learning disability arena.

Learning points

- ▶ This case study demonstrates that medication can be successfully reduced/withdrawn when it has been prescribed in a person with learning disability for behaviour that challenges.
- ▶ We believe that ideally, during the process of deprescribing, one medication should be withdrawn at a time in order that the patient's condition can be monitored.
- ▶ In this case, the deprescribing led to more engagement with activities, increased access to the community, increased flexibility in his routine and a reduction in body mass index.
- ▶ In the longer term, the withdrawal of olanzapine and carbamazepine reduces the risk to physical health.
- ▶ The parent and carer were actively involved in monitoring the patient's behaviour while he was undergoing the deprescribing process.
- ▶ The pharmacist should take account of the above issues when reviewing psychotropic medication with psychiatrists, general practitioners, patients, their carers and relatives.

Competing interests None declared.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

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