NICE National Institute for Health and Care Excellence

Medicines Evidence Commentary

commentary on important new evidence from Medicines Awareness Weekly

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Stopping or reducing antipsychotics in people with learning disabilities who have challenging behaviour

A systematic review of mainly observational studies of first-generation (typical) antipsychotics found that antipsychotics can be reduced or discontinued in a substantial proportion of adults with learning disabilities who use them for challenging behaviour. However, some studies showed that this may be associated with adverse consequences, including behavioural deterioration and dyskinesia in some people. The systematic review had several limitations, including poor quality studies that reported a wide range of antipsychotic discontinuation rates, mostly in people with severe learning disabilities. It nevertheless is in line with current national guidance that antipsychotic medication used for behaviour should be reviewed regularly with an individualised approach taken to treatment (see NICE guidelines on challenging behaviour and learning disabilities and mental health problems in people with learning disabilities).

Overview and current advice

Approximately 5–15% of people with learning disabilities in educational, health or social care services have behaviour that challenges, with higher rates in teenagers and people in their early 20s, and in specific settings. More recently, there have been concerns about the overuse of antipsychotics in these people and several national reports on the use of psychotropic medicines in people with challenging behaviour and learning disabilities have been published. This has been addressed in detail in the NICE Key therapeutic Topic (KTT) Psychotropic medicines in people with learning disabilities whose behaviour challenges (KTT19). The KTT advises that it is important to review and, if appropriate, optimise prescribing and local policies relating to the treatment of challenging behaviour in people with learning disabilities to ensure these are in line with the NICE guidance on challenging behaviour and learning disabilities. A previous NICE Medicines Evidence Commentary discussed a large UK observational study[1], which found that the proportion of people with a learning disability who had been treated with psychotropic drugs far exceeded the proportion who had a recorded mental illness. Antipsychotics were often prescribed to people who did not have a diagnosis of severe mental illness but did have a record of challenging behaviour.

The NICE guideline on challenging behaviour and learning disabilities makes recommendations on providing support and interventions for people with a learning disability and behaviour that challenges, and their family members or carers. Medication should be considered or optimised (in line with the NICE guideline on medicines optimisation) for coexisting mental or physical health problems that have been identified as factors in the development and maintenance of such behaviour. Antipsychotics should only be considered for behaviour that challenges if psychological or other interventions alone

do not produce change within an agreed time, or treatment for any coexisting mental or physical health problem has not led to a reduction in the behaviour, or the risk to the person or others is very severe (for example, because of violence, aggression or self-injury). An antipsychotic should only be offered in combination with psychological or other interventions and initially prescribed and monitored by a specialist.

A NICE interactive flowchart on challenging behaviour and learning disabilities brings together all related NICE guidance and associated products on this topic in a set of interactive topic-based diagrams. In addition, the NICE quality standard on learning disabilities describes a concise set of prioritised statements designed to drive measurable quality improvements within these areas.

New evidence

A systematic review of 21 studies (published from 1990 until 1 March 2016) looked at the evidence on the outcome of reducing or discontinuing long-term antipsychotic medication that had been prescribed for managing challenging behaviour in 1027 adults with intellectual disability[2]. Studies were included if adults (aged over 18 years) with intellectual disability had been prescribed antipsychotics primarily to manage challenging behaviour (rather than to treat mental illness) for at least 12 weeks before attempts were made to reduce or discontinue them. Reduction was defined in the study as a sustained change in antipsychotic medication to a lower dose and discontinuation as the complete cessation of antipsychotic medication; these were carried out according to any schedule.

Most (17) studies were observational studies, but there was also 1 open randomised controlled trial (RCT) reported in 2 papers, 1 case series and 1 case report. More than half of the studies (13) included only participants who were living in institutions. Only 5 studies were carried out in Europe, with 1 in Australasia and 15 in the USA. In several studies, details of participants were incompletely reported. The mean age of participants ranged from 24 to 50 years, two thirds were men and more than 80% were described as having “profound” intellectual disability. In most studies, a small proportion of participants had also been diagnosed with comorbid mental illness. Most of the antipsychotics were first-generation (typical) agents.

The primary outcome was the proportion of participants achieving dose reduction or discontinuation without dropout or reinstatement of the antipsychotic. Ten studies (801 participants ranging from n=6 to n=245 and follow-up ranging from 3 months to over 10 years) described this outcome. Due to variability in study design, the authors were unable to estimate a summary measure of successful reduction or discontinuation of antipsychotics in these people, but instead provided broad ranges for this outcome. The proportion of participants who discontinued antipsychotics ranged from 4% to 74% and the proportion maintained on a reduced antipsychotic dose at follow-up ranged from 19% to 83%. The proportion of unsuccessful attempts to reduce or discontinue antipsychotics ranged from 0% to 96%. It was not always possible to distinguish between the 3 groups accurately because of poor reporting.

Secondary outcome measures included change in behaviour, physical health, mental health and cognitive or adaptive functioning in those who reduced or discontinued antipsychotic medication. As with the primary outcome, because of the differences between studies, the authors were unable to summarise the effects of stopping or reducing antipsychotics on these parameters. For the 6 studies that reported on behaviour outcomes, the results were inconclusive. Of these, 2 studies reported either no change or an improvement in behaviour after stopping or reducing the antipsychotic. However, the other 4 studies reported substantial behavioural deterioration in 40% to 96% of people undergoing dose reduction, which could persist for several years.

Studies that looked at movement disorders tended to report an increase in dyskinesia following reduction or discontinuation of antipsychotics, although some studies suggested this was a transient

effect. For autonomic disturbances (a known side effect of antipsychotics), one study (n=98) reported a reduction in this following reduction or discontinuation of antipsychotics. The very small RCT (n=56) did not find a statistically significant reduction in weight compared with controls after reducing or stopping antipsychotics (follow-up 1 month after planned discontinuation). However, a small observational study (n=36 from a larger cohort of 98) reported statistically significant reductions from baseline in waist circumference, weight, body mass index and systolic blood pressure in the participants who stopped their antipsychotics and remained antipsychotic free at 12 weeks. Three studies that looked at cognitive function reported improvements following reduction or discontinuation of antipsychotics. No studies reported on the effects of mental function after reducing or stopping antipsychotics.

The authors performed a separate search to try and identify factors associated with unsuccessful attempts to reduce or discontinue antipsychotics. Factors often were not very clear or were conflicting between studies. However, they suggested that less successful withdrawal may occur in people who have had previous failed attempts to reduce their antipsychotics and people with a high level of psychopathology (such as people with comorbid illness that deteriorates when their medication is reduced). More successful withdrawal was seen in studies where the baseline antipsychotic dose was lower. Use of concomitant psychotropics (including antiepileptics) showed benefit in facilitating antipsychotic withdrawal attempts, but this was not a consistent finding.

Commentary

Commentary provided by NICE

This systematic review[2] found that antipsychotics can be reduced or discontinued in a substantial proportion of adults with learning disabilities who use them for challenging behaviour, but not always without adverse consequences. However, variability in study design meant that it was not possible to estimate a summary measure of successful reduction or discontinuation of antipsychotics in these people. The authors concluded that some people show deterioration in behaviour when antipsychotics are reduced (and the antipsychotic had to be restarted in some people), but it was not easy to identify predictors of poor response. Even so, some improvement in cognitive ability and weight was seen in a few studies after reducing or discontinuing antipsychotics. Results suggest that dyskinesia after withdrawing treatment may persist for several months, but longer-term studies suggests that it reduces over time to baseline rates. A strength of this study, reported by the authors, is that it was the first comprehensive systematic review of this area in clinical practice that they were aware of.

It is important to consider the results of this systematic review in view of its limitations. The quality of the studies included was generally poor with small numbers of participants, selection bias, inadequate control groups and blinding, as well as incomplete reporting of outcomes or statistical testing and inadequate standardised or validated outcome measures. Also, since most of the studies were observational, it is not known what confounding factors had been accounted for that might have influenced the results. In addition, most studies were of first-generation antipsychotics and most included a high proportion of people who had severe to profound learning disability, who make up a minority of the people with learning disabilities. Therefore, the findings cannot be extrapolated to people who are taking second-generation (atypical) antipsychotics or those with less severe learning disabilities. No study considered the effects of withdrawal on mental health.

Whilst it was not possible to draw firm conclusions to inform a population based approach to reducing or discontinuing antipsychotics in people with learning disabilities, the authors highlighted that living environment and carer characteristics (such as working conditions, staff experience and training) might be important. Their conclusion that antipsychotic medication used for behaviour should be reviewed regularly and an individualised approach taken to treatment is consistent with current NICE guidance in this area.

The NICE guideline on challenging behaviour and learning disabilities highlights the importance of appropriate documentation when starting an antipsychotic, including a rationale for the medicine (which should be explained to the person with learning disability and everyone involved in their care), how long the medicine should be taken for and how the treatment should be reviewed and stopped. The NICE guideline on mental health problems in people with learning disabilities makes recommendations for people with learning disabilities who are taking antipsychotic medicines and not experiencing psychotic symptoms. These recommendations include reviewing the person's condition after reducing or discontinuing a prescription and annually documenting the reasons for continuing a prescription if it is not reduced or discontinued.

In July 2015 NHS England pledged urgent action on over-medication of people with learning disabilities. The NHS England publication stopping over-medication of people with learning disabilities provides support to begin the process of challenging the continued need for psychotropic medication in people with a learning disability. The toolkit includes suggested steps to reduce inappropriate prescribing for GP practices, examples of good practice from NHS organisations and example case studies of psychotropic medicine reduction. The publication also includes an algorithm for the review, reduction or stopping of psychotropic medicines in people with a learning disability.

Study sponsorship

No sponsorship details for this systematic review are recorded.

References

1. Sheehan R, Hassiotis A, Walters K et al. (2015) Mental illness, challenging behaviour, and psychotropic drug prescribing in people with intellectual disability: UK population based cohort study. BMJ 351:h4326
2. Hassiotis A, Sheehan R. (2016) Reduction or discontinuation of antipsychotics for challenging behaviour in adults with intellectual disability: a systematic review. Lancet Psychiatry (online publication) http://dx.doi.org/10.1016/S2215-0366(16)30191-2

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