CLINICAL CASE REPORTS AND VIGNETTES

Deprescribing in Child and Adolescent Psychiatry

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Deprescribing is the structured approach to drug discontinuation. The term was first developed in the fields of geriatric medicine and end-of-life care, before broadening the scope to primary care and, more recently, psychiatry. It is not synonymous with medication cessation; rather, the goal of deprescribing is "parsimonious use,"[1] or use that is sparing or restrained. The deprescribing process is the systematic approach to identifying and discontinuing drugs when existing or potential harms outweigh existing or potential benefits. This is accomplished with consideration of an individual's goals, functioning, values, and preferences.[2]

Deprescribing is especially relevant in child and adolescent psychiatry. Normal development can lead to changing formulations and the need to reassess treatment plans over time. Biological aspects of disorders may change with neurodevelopment and youths' growing ability to use cognitive resources to manage their symptoms. Environmental factors are particularly dynamic and important to consider given that youth interact daily with multiple social systems including peers, family, and school. Additionally, there is consistent evidence that children and adolescents are particularly sensitive to certain medication side effects.[3] Minimal data are available pertaining to the safety of long-term use of medications in youth. This is particularly concerning for medications such as atypical antipsychotics that are known to be associated with weight gain, development of diabetes, and metabolic syndrome.

In psychiatry, there are particular challenges to deprescribing including a lack of diagnostic and therapeutic precision, focus on symptomatic rather than functional outcomes, reliance on individuals' subjective experience of symptoms, and discontinuity in treatment relationships and systems of care.[1] This is further compounded by the relative lack of clinical evidence for medication discontinuation and limited incentives for pharmaceutical companies to dedicate funds for research.

I was introduced to the concept of deprescribing within my first few months as a child psychiatrist. The first outpatient case I was assigned as a CAP fellow was Michael, a lively 10-year-old boy, who was the middle of three children in a nuclear family with two working parents. He had a history of attention-deficit/hyperactivity disorder (ADHD) and oppositional behavior at home and had been previously diagnosed with an unspecified depressive disorder. In the space below, I outline the application of deprescribing to his care and identify important principles I learned for approaching deprescribing in child and adolescent psychiatry.

When we started treatment, Michael was prescribed lisdexamfetamine, low-dose risperidone, and fluoxetine. The history provided by the parents was that when Michael was eight years old, he started lisdexamfetamine for his ADHD (after two brief stimulant trials that were not tolerated due to sleep disturbance). Subsequently, he developed affective lability and irritability for which the psychiatrist started fluoxetine. This quickly progressed to self-harm behavior (slamming his fingers in a drawer) for which he was then prescribed risperidone. This regimen was continued by at least three different child psychiatrists with only minor dose adjustments for almost two years. This was particularly striking as he had not apparently done well with respect to home or school functioning during this time.

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Though my assigned role was to provide individual therapy, I quickly gathered that this modality alone would have a low yield for addressing the current issues with Michael's functioning. I discussed with his parents doing combined therapy and medication management, and outlined my concerns about the risks of long-term use of an atypical antipsychotic without clear benefit or indication. I used a standardized rating scale which validated the youth had mild-to-moderate depressive symptoms. I maintained on the differential that this was potentially a side effect from his medication, presumably lisdexamfetamine, which in one placebo-controlled trial in 278 children caused irritability in 10% and affective lability in 3%.

Working in collaboration with the family, we began the process of deprescribing. During this time, I met with the family every one-to-two weeks for individual therapy and to provide evaluation of, and support for, medication changes. We transitioned lisdexamfetamine to a combination of long-acting and immediate release methylphenidate, with an improvement in irritability and depressive symptoms. This was followed by

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a slow taper of risperidone and then fluoxetine, with no worsening of mood or impulsive behavior. This coincided with the parents participating in a behavior management group, which significantly helped with managing oppositional behavior in the home. Within six months, Michael's mood, irritability, and oppositional behavior were stable on a regimen consisting of only methylphenidate. His ADHD symptoms, including inattention, hyperactivity, and impulsivity, persisted at home and school, though were not worse than while on his previous regimen. We continued titrating methylphenidate and started clonidine ER to address ongoing ADHD symptoms. As Michael started sixth grade about one year into our treatment, his ADHD symptoms were better controlled than ever before, on a regimen of methylphenidate, clonidine, and melatonin. While he was still taking multiple medications, this regimen posed fewer serious potential risks than his previous combination. Additionally, there is evidence for both efficacy and tolerability for this combination in the management of his primary diagnosis of ADHD.[4]

The process of deprescribing includes a review of all medications, identification of medications that could be ceased or reduced, collaborative planning of the deprescribing regimen, and providing guidance and support to the patient and caregivers.[1] This case illustrates several important considerations for deprescribing in child psychiatry:

- Providing a comprehensive psychiatric assessment, especially when care is being transitioned from another provider or if the child is already on psychotropic medication
- Evaluating effectiveness of medications for the original target symptoms or indication
- Reviewing the evidence-base, particularly when considering medication combinations, which in many instances have limited empirical support

- Evaluating potential contribution of adverse medication effects as opposed to a co-morbid disorder, such as mood symptoms in the above case resulting from a medication side effect
- Using evidence-based psychosocial intervention, for example parent management training for ADHD and oppositional defiant disorder

Child and adolescent psychiatrists make decisions about the use of medications, at times without diagnostic clarity and with insufficient information about risks and benefits of different treatment options. When providing clinical care, appropriate prescribing should include consideration of deprescribing. The concept of deprescribing should be taught formally in psychiatry training programs. Further research is needed to better characterize when and how deprescribing can be most effectively applied.

Identifying information regarding this patient has been changed or omitted. Each parent and patient have given permission for the publication of information about their case. ■

References

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