Weight gain and glucose dysregulation with second-generation antipsychotics and antidepressants: a review for primary care physicians.

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Abstract
Second-generation antipsychotics (SGAPs) and second-generation antidepressants (SGADs) have multiple US Food and Drug Administration-approved indications and are frequently prescribed by primary care physicians. We review the relative potential of these drugs to cause weight gain and glucose dysregulation, and offer clinical guidance to minimize and manage this risk. Among SGAPs, clozapine and olanzapine have a high risk for causing weight gain and glucose dysregulation; iloperidone, paliperidone, quetiapine, and risperidone have a medium risk; and aripiprazole, asenapine, lurasidone, and ziprasidone have a low risk. Young, drug-naïve patients are particularly vulnerable to weight gain associated with SGAPs. With the exception of clozapine, SGAPs have modest differences in their efficacy; however, their side effect profiles may influence selection. Using SGAPs with high metabolic liability conservatively and limiting their off-label use are important means to minimize risk. Patients should be screened before initiating any SGAP (or any antipsychotic medication) and monitored subsequently following standard guidelines, such as those provided by the American Diabetes Association. Healthy lifestyle counseling should be offered to all patients. Patients showing evidence of significant weight gain should be switched to an SGAP with a lower metabolic liability. Metformin may have some utility in young patients with limited exposure to antipsychotic drugs if lifestyle interventions fail and switching the SGAP is not an option. This option should be tried sooner than later for the best possible result. For SGADs, paroxetine and mirtazapine are associated with weight gain, and bupropion may cause modest weight loss. Other SGADs are mostly weight neutral, but individual variations may occur. Depression is associated with weight change and is a risk factor for glucose dysregulation. Treatment of depression improves glucose metabolism. We recommend that all patients taking SGADs be screened using anthropometric measures and metabolic assessment at baseline. Monitoring should be guided individually based on weight gain and other risk factors.

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