Objective This study assessed the metabolic effects of aripiprazole and pimozide in children with Tourette syndrome, a neurodevelopmental condition characterised by multiple motor and phonic tics.

Method Young patients treated with aripiprazole (n=25) and pimozide (n=25) were compared to patients who were medication-free (n=25) for metabolic parameters. Body mass index, glycemia, triglyceridemia and cholesterolemia were monitored at baseline, 12 and 24 months after treatment commencement.

Results The aripiprazole group showed significant increases in cholesterolemia, while the pimozide group showed significant increases in glycemia. Both groups showed elevations in triglyceridemia which were not significantly different to those seen in un-medicated controls.

Conclusion While both aripiprazole and pimozide appear relatively safe for use in children with Tourette syndrome, these findings will help guide medication selection in cases with specific medical vulnerabilities.