Almost all antipsychotics result in weight gain: A meta-analysis

Maarten Bak
Maastricht University, Netherlands

Introduction: Antipsychotics (AP) induce weight gain. However, reviews and meta-analyses generally are restricted to second generation antipsychotics (SGA) and do not stratify for duration of AP use. It is hypothesized that patients gain more weight if duration of AP use is longer.

Method: A meta-analysis was conducted of clinical trials of AP that reported weight change. Outcome measures were body weight change, change in BMI and clinically relevant weight change (7% weight gain or loss). Duration of AP-use was stratified as follows: ≤6 weeks, 6-16 weeks, 16-38 weeks and >38 weeks. Forest plots stratified by AP as well as by duration of use were generated and results were summarized in figures.

Results: 307 articles met inclusion criteria. The majority were AP switch studies. Almost all AP showed a degree of weight gain after prolonged use, except for amisulpride, aripiprazole and ziprasidone, for which prolonged exposure resulted in negligible weight change. The level of weight gain per AP varied from discrete to severe. Contrary to expectations, switch of AP did not result in weight loss for amisulpride, aripiprazole or ziprasidone. In AP-naive patients, weight gain was much more pronounced for all AP.

Conclusion: Given prolonged exposure, virtually all AP are associated with weight gain. The rational of switching AP to achieve weight reduction may be overrated. In AP-naive patients, weight gain is more pronounced.

Addendum: New data will be available, considering association of psychiatric diagnosis and obesity and antipsychotic medication.

Biography
Maarten Bak is a Psychiatrist since 1999, trained in Maastricht University Hospital. He has completed his PhD in 2004 in “Coping with Psychosis; Blueler’s Right”. He is Director of the Medication Monitor, assessing effects and side effects of long term antipsychotic use. The side effects monitored are metabolic effects, movement disorders and sexual side effects. His scientific work centers on effect and metabolic side effects of antipsychotics. He has published over 50 papers in reputed journals.

m.bak@maastrichtuniversity.nl