

23. "Prevalence of Diabetes During Extended Clozapine and Olanzapine Treatment" - Dan Casey MD

Retrospective chart review at the Portland VA of patients receiving extended treatment of clozapine over 1-5 years or olanzapine over 1-3 years

Diabetes rates for Clozapine were:

1 year = 14.7% (5 of 34 patients)

3 year = 18.5% (5 of 27 patients)

5 year = 23.1% (3 of 13 patients)

Diabetes rates for Olanzapine were:

1 year = 26.7% (32 of 120 patients)

2 year = 24.4% (20 of 82 patients)

3 year = 35% (7 of 20 patients)

Clozapine patients tended to gain weight through out the 5 year study period where as Olanzapine patients weight gained stabilized at the 1 year point with no further weight gain observed beyond 1 year.

In both treatment groups increases in weight and BMI were similar for those with and without diabetes.

Conclusion - he concludes that these data confirms that diabetes is prevalent in patients taking clozapine and olanzapine and that prevalence tends to increase with extended treatment.

Comments: This is a pure retrospective examination of patient data, there are no controls for baseline diabetes rates, or risk factors. What selection biases may be present in determining how physicians decided which antipsychotic to use for a given patient? What is the baseline rate of diabetes in the mentally ill population within this particular VA system? Do they have a higher than normal minority population? The diabetes rates seen here are higher than any other study, suggesting something is different in their patient population. No data is given as to whether these diagnoses were made via fasting blood glucoses, OGTT or random values. This could have a huge impact upon the high rates observed. Based upon the data presented it is not possible to establish that there is a causal link as is suggested in the authors conclusions. It is unclear from the abstract what the total *N* is for each treatment group. For instance were there 34 total Clozapine patients examined or was it 74 (34+27+13)? They had 5 of 34 clozapine patients exhibit diabetes at year 1 and 5 of 27 at year 3. Are these the same 5 patients or 5 new ones? He would suggest that his prevalence is going up when it appears that he may be just double counting existing patients. Were the 7 Olanzapine patients at year 3 new cases or were all or none part of the 32 diabetics in year 1? This was unclear from both his poster and the abstract. Unfortunately I did not get a chance to discuss this with Dr Casey, did anyone else talk with him?

I cannot locate a copy of this poster today. As I understand it, this is a cross-sectional examination, so will reflect only patients who remain on a particular drug yet hospitalized for the number of years specified. This likely is a very atypical group of patients, and treatment-refractory may be at higher risk. It does not allow comparison to risperidone or other typical antipsychotics.