SEXUAL FUNCTION IN SCHIZOPHRENIA

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BACKGROUND AND SIGNIFICANCE

Two major classes of medications are used to treat psychosis: dopamine receptor antagonists ("typicals") and serotonin-dopamine antagonists ("atypicals"). Most dopamine receptor antagonists have significant effects on other types of receptors, including adrenergic, cholinergic, and histaminergic receptors. Effects on sexual function are mediated primarily through the resulting imbalances in activity at these sites. These side effects include breast enlargement, galactorrhea, anorgasmia and decreased libido, to name a few (Sadock 2003).

Studies that highlight sexual functioning in patients with schizophrenia have recently been published, however, the majority focused solely on laboratory markers (prolactin and other reproductive hormones), have compared only one drug to another, and/or studied men only. Of these studies, the few that did use a self-report measure of sexual function used the Arizona Sexual Experience Scale, a five-item scale, which may not be inclusive enough to fully assess the scope of sexual dysfunction.

One study, similar in design to this proposed study, compared multiple agents in both men and women, used the Changes in Sexual Functioning Questionnaire (CSFQ) for assessment of sexual function, and controlled for severity of illness. The study found that high rates of sexual impairment were found in both male and female patients but no significant differences were found between medication groups. However, 69% of patients completed only part of the CSFQ assessment (Fan et al 2007).

OBJECTIVES

To study the relationship between self-reported sexual function in both men and women diagnosed with schizophrenia and schizoaffective disorder, treatment with antipsychotic medication, and disease severity.

CRITERIA

Inclusion criteria: age 18-65, able to participate in a structured interview, meet criteria for Schizophrenia or Schizoaffective disorder per the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), on stable doses of one or more antipsychotic for at least six weeks.

Exclusion Criteria: taking a Selective Serotonin Reuptake Inhibitor (SSRI), inability to provide informed consent

METHODS

Patients of Beth Israel Medical Center's outpatient psychiatric clinic, approximately 2,000 patients, as well as inpatient psychiatric units, approximately 100 patients, who are diagnosed with schizophrenia or schizoaffective disorder are eligible to participate. Clinic and inpatient psychiatrists were asked to refer patients with either diagnosis to research study staff.

Once patients are evaluated to ensure they meet enrollment criteria and provide informed consent, they are administered three surveys. The Positive and Negative Syndrome Scale (PANSS) is a structured interview which rates 30 different symptoms in three categories: positive symptoms, negative symptoms, and general psychopathology. The Abnormal Involuntary Movement Scale (AIMS) is a brief twelve item rating scale of involuntary movements. Both the PANNS and the AIMS are administered by a member of the research study staff. Patients then complete the 15-item International Index of Erectile Function (EF, for men), or the 19-item Female Sexual Function Index (FSI, for women), either privately or with the help of research study staff if they prefer.

RESULTS

Results: Sexual Function Score* for Typicals vs. Atypicals

*Total sexual function score presented as percentage of maximum possible score on the IIEF or FSFI

Results: Sexual Function Score* for Monotherapy vs. Polypharmacy

*Total sexual function score presented as percentage of maximum possible score on the IIEF or FSFI

DISCUSSION

- Patients taking typical antipsychotic had marginally worse score on sexual function scale
- Patients taking multiple antipsychotics scored better on the sexual function scales
- Those on prolactin-sparing agents tended to rate sexual function as higher
- We noticed a trend where clozapine was associated with more sexual dysfunction compared to other antipsychotics
- No trend noticed between PANSS scores and sexual dysfunction
- No trend noticed related to AIMS scores
- High prevalence of sexual dysfunction in patients
- Prolactin sparing agents associated with less sexual dysfunction
- There is an advantage to the use of atypical antipsychotics

REFERENCES

Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision. Washington, DC: American Psychiatric Association; 2000.

Fan X, Henderson DC, Chiang E, Briggs LB, Freudenreich O, Evins AE, Cather C, Goff DC. Sexual functioning, psychopathology and quality of life in patients with schizophrenia. *Schizophr Res.* 2007 Aug; 94(1-3):119-27.

Sadock, BJ, Sadock VA. *Kaplan & Sadock's Synopsis of Psychiatry*, Ninth Edition. Philadelphia: Lippincott Williams & Wilkins; 2003.

*full list available upon request