Case Report

ESCILATOPRAM INDUCED EMESIS, WORD FINDING DIFFICULTY AND HYPONATREMIA: A CASE REPORT

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ABSTRACT

Escilatopram is an orally administered selective serotonin reuptake inhibitor (SSRI). The ADRs associated with Escilatopram are - abnormal bleeding, Hyponatremia, activation of Mania/Hypomania, Seizures, Interference with Cognitive and Motor Performance. Also it has got serious Drug-Drug Interactions with a variety of drugs. A female patient of age 60 years was brought to casualty with hypertensive urgency. She was put on metoprolol, amlopidine, telmisartan and hydrochlorothiazide combination, escilatopram and clonazepam combination, along with other drugs. On day 2 her lab reports stated dys electrolytemia and upon analysing the prescription, it was found that there were many drug-drug interactions. By avoiding such combination of drugs and also by choosing an appropriate antidepressant, such adverse effects could have been averted.

KEYWORDS: Escilatopram, Hyponatremia, Elderly people, Antidepressants, SSRI.

INTRODUCTION

Upon induction of escilatopram into the market, it was thought that this compound has got less ADRs when compared to the parent compound, citalopram, but many case reports keep on appearing over the adverse effects of escilatopram, of which the most frequent ones are Hyponatremia and SIADH. We would like to report one more case of Escilatopram-induced hyponatremia, word finding difficulty and of course emesis. Recurrent vomiting was never attributed to escilatopram before, but we have got a case of recurrent vomiting along with hyponatremia and word finding difficulty.

Escilatopram is an orally administered selective serotonin reuptake inhibitor (SSRI). Escitalopram is the pure S-enantiomer (single isomer) of the racemic bicyclic phthalane derivative citalopram. Escitalopram oxalate is designated S(+)-1-[3-(dimethyl amino)propyl]-1-(p-fluorophenyl)-5-phthalancarbonitrile. The mechanism of antidepressant action of escitalopram, the S-enantiomer of racemic citalopram, is presumed to be linked to potentiation of serotonergic activity in the central nervous system (CNS) resulting from its inhibition of CNS neuronal reuptake of serotonin (5-HT).

Escitalopram has no or very low affinity for serotonergic (5-HT1-7) or other receptors including alpha- and beta-adrenergic, dopamine (D1-5), histamine (H1-3), muscarinic (M1-5), and benzodiazepine receptors. Escitalopram also does not bind to, or has low affinity for, various ion channels including Na+, K+, Cl−, and Ca++ channels. Escitalopram is indicated in major depressive disorder, generalised anxiety disorder and obsessive compulsive disorder in the dose of 10mg once daily and can be increased to a maximum of 20 mg once daily after at least one week. It’s off label indications include- Hot flashes (initially 10 mg once daily then increasing the dose to 20 mg once daily after 4 weeks) and Panic disorder (initial 5mg once daily for 7 days, then increase dose to 10 mg once daily, consider further dosage adjustments based on response and tolerability up to 20 mg once daily). Many warnings, disease related concerns and ADRs are associated with escitalopram. Major psychiatric warnings are suicidal thinking and behaviour. Disease related concerns are Cardiovascular disease, Hepatic impairment, Mania/hypomania, Metabolic disease, Renal impairment, Seizure disorders. The ADRs associated with escitalopram are many, to list a few- Abdominal cramps, abnormal gait, acute renal failure, aggressive behavior, agitation, depression, hypertension, hypertensive crisis, hypoesthesia, hypoglycemia, hypokalemia, hyponatremia, hypoprothrombinemia, hypotension, serotonin syndrome, SIADH, etc.

Naifshon E et al appears to be the pioneers in reporting the hyponatremic effects of escilatopram, followed by many.

Po-Hsin Tsai et al had reported recurrent hyponatremia in an elderly patient.

Susan Jacob et al had reported that age, female gender, concomitant use of diuretic agents, low body weight, lower baseline serum sodium concentrations are all the risk factors for development of hyponatremia with SSRIs

Ho-Ming Yang et al had reported about the escitalopram-induced word finding difficulty, which may be attributed to the ADR-confusion.

CASE REPORT

A female patient of 60 years was brought to casualty ward with complaints of vomiting, abdominal distension, headache, neck pain and pain in the chest (burning type). On examination the patient was conscious and coherent, pulse rate was 65, respiratory rate was 18, Blood Pressure was 180/90 and Temperature was normal and GRBS 207 mg/dL. The preliminary diagnosis was Hypertensive Urgency. Upon interviewing the patient’s attendee, we came to know that the patient was just discharged from another secondary care centre and was brought to this hospital directly. The discharge medication of previous hospital included the following drugs- Tab. Prolomet-XL BD, Tab. Zof erotic 8 mg BD, Tab. Pan 40 mg BD, Tab. Nexito Plus H/S, Tab. Telsartan-H 40 mg OD. The lab investigations performed at the other hospital were as
Escitalopram interacts with a wide variety of drugs and concomitant use of escitalopram is contraindicated with drugs that prolong QTc like Ondansetron. Also CNS Depressants may enhance the adverse/toxic effect of Selective Serotonin Reuptake Inhibitors. Specifically, the risk of psychomotor impairment may be enhanced. Selective Serotonin Reuptake Inhibitors may enhance the hyponatremic effect of Thiazide and Thiazide-Like Diuretics.

CONCLUSION

Escitalopram is the latest drug in SSRIs and it was thought that this drug will be having less adverse effects when compared to the parent molecule, but many case reports keep appearing over the hyponatremic effect of escitalopram and even new side effects are being attributed to this drug, as in this case report. It appears and the even all the doctors associated with this case are of the common opinion that escitalopram is responsible for Hyponatremia and word finding difficulty and may be even responsible for Emses in this patient. While prescribing SSRIs for the elderly, the physicians should be more cautious and should encourage monitoring of serum electrolytes more frequently and if emesis is present, should consider changing of medication to another class of drug. Also Escitalopram interacts with a wide variety of drugs, more frequently on pharmacokinetic parameters, hence extreme caution should be exercised where ever polypharmacy is unavoidable. Physicians should always remember that each and every drug has its own ADRs which are inherent to the molecule and each and every symptom that arises during therapeutic management of the patient does not require another pill.

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Abbreviation used: ADR - adverse drug reaction; SSRI s - selective serotonin reuptake inhibitors; SIADH - syndrome of inappropriate antidiuretic hormone; CNS- central nervous system; 5-HT - 5- hydroxy tryptamine; GRBS - general random blood sugar; ICU - intensive care unit; QTc - Q-T interval of ECG.

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