

SERTRALINE INDUCED NONHYPERINSULINEMIC HYPOGLYCAEMIA IN A NON DIABETIC PATIENT : A case report

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INTRODUCTION

Antidepressants, including SSRIs and tricyclic antidepressants, have been found to interfere with blood glucose metabolism, increasing the risk of hypoglycemic episodes. We present a case where sertraline was found to cause recurrent hypoglycaemia in a non diabetic patient.

DISCUSSION

Although the exact mechanism of hypoglycaemia caused by Sertraline is not known but it has been shown to blunt postprandial hyperglycemia in rats and to potentiate the hypoglycemic effects of sulfonylurea agents in humans (1). It is not been reported to cause hypoglycemia independently but in this patient hypoglycaemic episodes were resolved after discontinuation of sertraline.

CASE

A 44-year-old patient presented with symptoms of sweating, shaking and hunger, which were all eased by eating. Her symptoms were suggestive of hypoglycaemia, experienced predominantly 2-3 hours after meals. Hypoglycaemia was confirmed during these episodes. She had normal liver and renal function. There was no history of Diabetes Mellitus.

Her symptoms improved slightly with measures of adjusting her diet but did not settle completely. She also complained of lethargy, weight loss, and skin changes. We arranged 72 hours supervised fast, as well as a short synacthen test to rule out both the possibility of insulinoma and adrenal insufficiency.

72-hour fasting results revealed that she had insulin independent cause for hypoglycaemia. Her venous glucose was 2mmol/L, ketones > 5000mcg/L, C-peptide < 94pmol/L and serum insulin was 12pmol/L. Sulphonylurea screen was negative. The short synacthen test showed normal cortisol response of 352nmol/L at 0 minutes and 660nmol/L at 30 minutes.

She was on sertraline for depression and due to its potential side effect of hypoglycaemia, we stopped the drug, after exclusion of all other causes for the hypoglycaemia. Her symptoms completely resolved when she was weaned off Sertraline.

CONCLUSION

Prescription of SSRIs is common and due to the potential side effect of hypoglycemia associated with these drugs, SSRI usage should be considered when assessing patients for hypoglycaemia(2).

REFERENCES

1. P Timothy Pollak, Som D Mukherjee, Albert D Fraser- Sertraline-Induced Hypoglycemia-Annals of Pharmacotherapy
2. David Ni, MD1; Shikha G. Khosla, MD2; Eric S. Nylen, MD2 Sertraline-Induced Hypoglycemia in Type 2 Diabetes Patient-AACE Journals