ACUTE VENLAFAXINE OVERDOSE WITH POSITIVE URINE IMMUNOASSAY FOR TRAMADOL – CLINICAL AND DIAGNOSTIC OVERLAP - CASE REPORT AND LITERATURE OVERVIEW

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INTRODUCTION

The overlapping of pharmacokinetics and/or the pharmacodynamics of medicines causes the occurrence of overlapping clinical syndromes and diagnostic issues, potentiated in overdoses. We report a case of severe venlafaxine poisoning where the clinical presentation and the results of rapid immunoassay test overlapped with tramadol intoxication.

MATIRIALS AND METHODS

Case presentation. An unconscious women with recurrent seizers, hypertension and supposed acute medication poisoning in suicidal attempt was transported to our clinic. Previously, she had been lavaged, rehydrated and treated with 20 mg diazepam iv, 40 mg furosemide at the local general hospital. Her regular tablet therapy consisted of losartan, levothyroxine, venlafaxine, occasionally tramadol.

DISCUSSION

At admission she was comatose, with isochoric normal pupils, BP 130/80 mm Hg, Sa02 86%, and recurrent episodes of seizures treated with 10mg diazepam iv, ocular clonus, hypertonus, temperature 38.9C, diaphoresis, facial hyperaemia, dark coloured urine, hyponatremia and rhabdomyolisis. The lateral flow immunoassay (AbuGnostR) was positive for tramadol, but the homogeneous enzyme immunoassay did not confirm it. After 36 hours of intensive treatment she became somnolent and reported ingestion of 2250 mg tbl Venlafaxine. The AbuGnost R test detects tramadol at cut off urine values 200ng/ml, but present cross reactivity with O-desmethylvenlafaxine at cut off values up to 25000ng/ml. The following days she complained of muscular weakness, headaches and cognitive impairment, which lasted for more then one month after release from hospital.

Results

High concentrations of venlafaxine metabolites induce false positive tramadol immunoassay (AbuGnostR) test.

Conclusion

Overlapping clinical presentations and metabolic pathways of venlafaxine and tramadol should alert physicians when interpret rapid immunoassay test. The mandatory principle when making medical decisions should cover synthesis of critically interpreted toxicology analysis, interview data and clinical features of the poisoning, which may help to avoid misleading conclusions and improve the diagnostic and therapy decisions