

PERPHENAZINE AND PROPRANOLOL POISONING: A CASE REPORT



@carloalo93

C.A. ALONSO PERALTA¹, T. GIMENEZ PODERÓS¹, D. GÓMEZ GÓMEZ¹, R.M. GONZÁLEZ FRANCO¹, B. ROGADO VEGAS¹, J. CASANOVA VÁZQUEZ¹, M. RIOJA CARRERA¹, P. DEL RIO ORTEGA¹, L. PEREZ-PERIAÑEZ ORRILLO¹, I. ARAGON GRACIA¹, M. VALERO DOMÍNGUEZ¹.

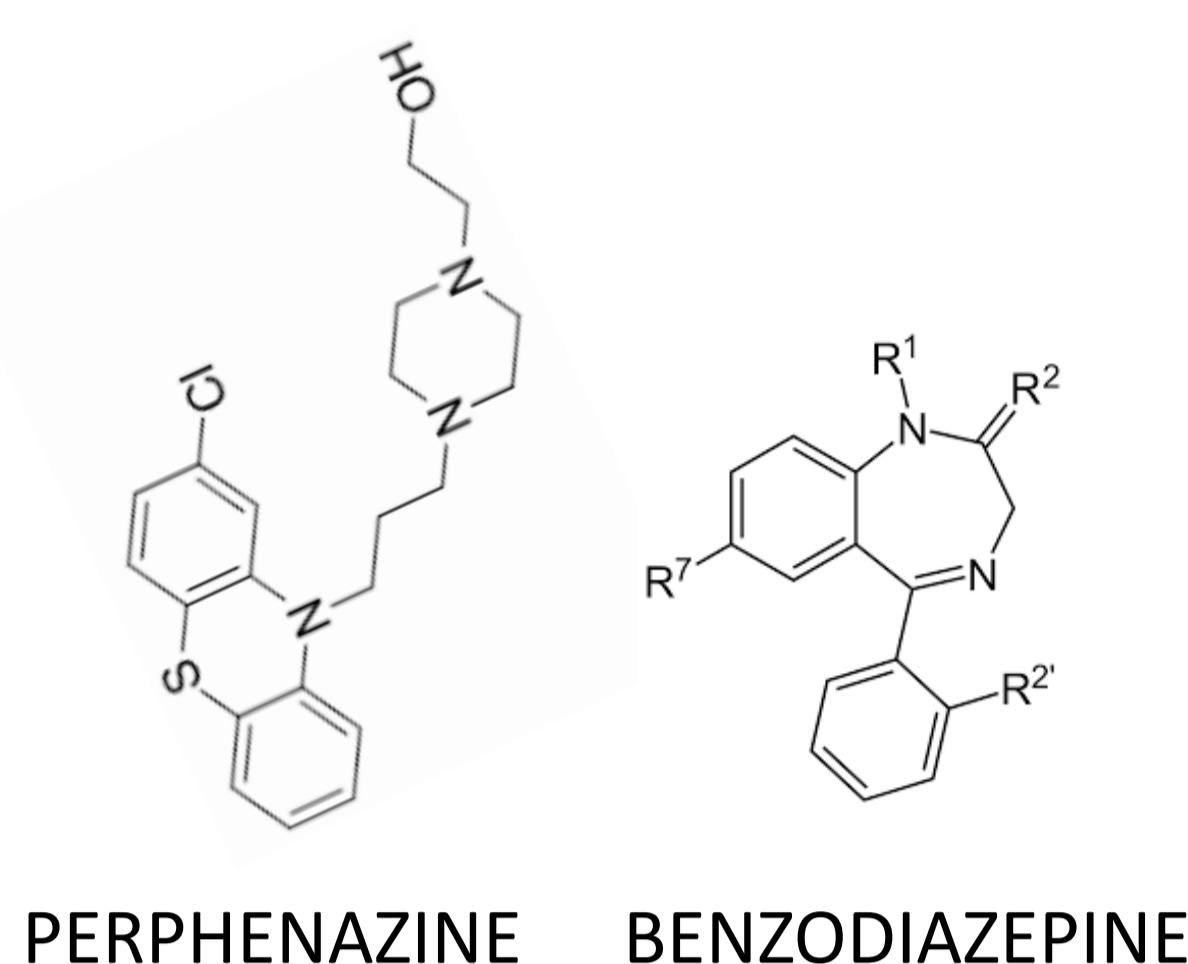
¹HOSPITAL UNIVERSITARIO MARQUÉS DE VALDECILLA, FARMACIA HOSPITALARIA, SANTANDER, SPAIN.

BACKGROUND AND IMPORTANCE

The combination of perphenazine, typical antipsychotic, with propranolol, beta adrenergic antagonist, increases the concentrations of both drugs by pharmacokinetic interaction(1).

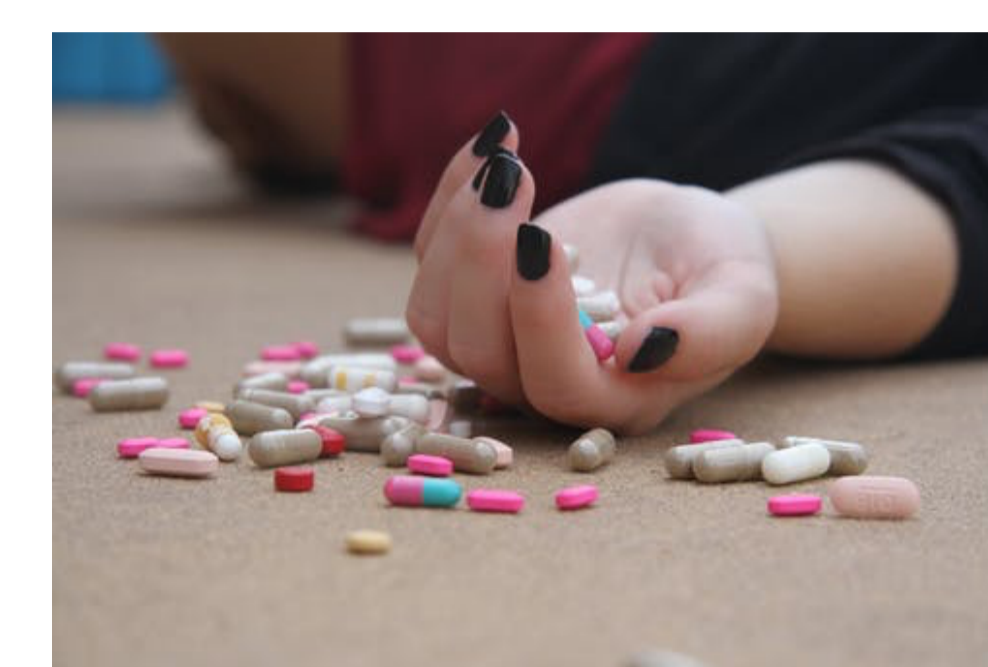
The main effect of the interaction described is the potentiation of the hypotensive effect.

Typical antipsychotics have an anticholinergic and antihistamine effect that can cause drowsiness, but also have structural similarities with benzodiazepines.

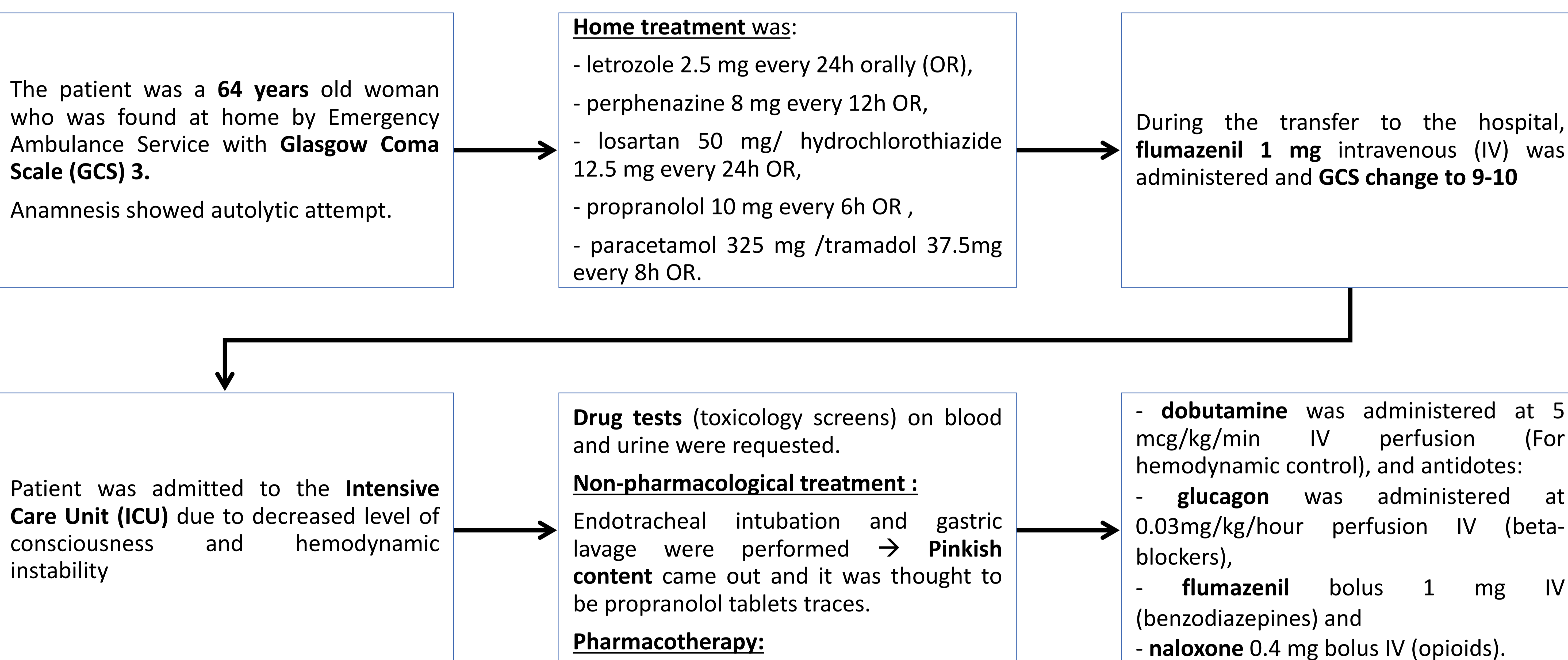


AIM AND OBJECTIVES

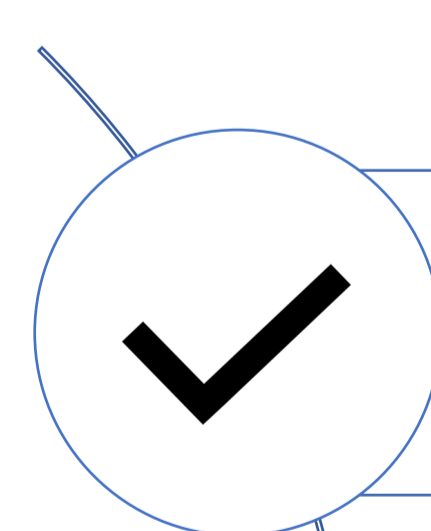
Describe a clinical case of a patient with drug poisoning and the interaction between perphenazine and propranolol and its hemodynamic and central nervous system (CNS) depressant effect.



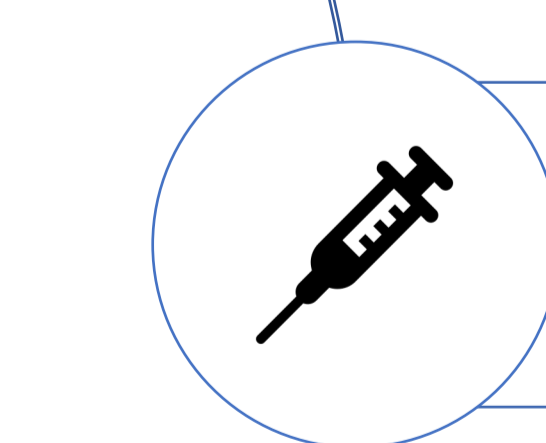
MATERIAL AND METHODS



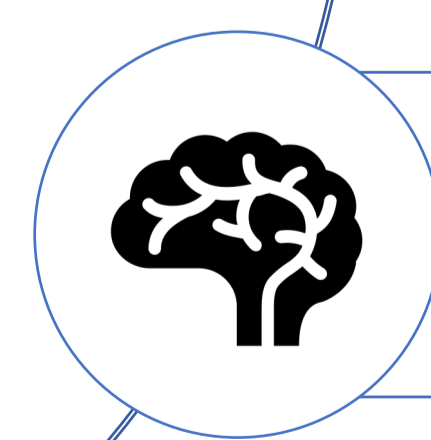
RESULTS



Drug tests showed positive urine and blood levels of **84.1g/L** for benzodiazepines. In the anamnesis she did not take benzodiazepines.



Dobutamine, glucagon and naloxone were stopped because of test results and hemodynamic improvement.



Flumazenil 1 mg bolus IV was administered again and perfusion flumazenil was started at 0.5 mg/h IV until the level of consciousness was regained and the patient answered verbal orders what happened 4 hours later.

CONCLUSION AND RELEVANCE

Perphenazine can produce possible false positives to benzodiazepines. The interaction between perphenazine and propranolol can trigger hemodynamic instability and CNS depression, which can successfully manage with dobutamine, glucagon and flumazenil.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Lexicomp: Interactions. Perphenazine-propranolol[Internet]. Available at: <https://online.lexi.com/lco/action/interact>