An audit of the management of tricyclic antidepressant overdose in the emergency unit of Steve Biko Academic Hospital, Pretoria, South-Africa from 2009 to 2012

Background: Tricyclic antidepressants (TCA) are frequently used in South-Africa due to their availability and low costs. These drugs are highly toxic in overdose.

Aim: The aim of the study was to audit the key aspects in the management of patients with TCA overdose against an international benchmark.

Methods: A cross sectional descriptive audit of clinical records was done. The findings were measured against the Guidelines for medical therapy of the emergency network (GEM net).

Results: Thirty-two clinical records were recruited and audited. The following findings were made: The vital signs of 30 (93.7%) patients were recorded, 21 (70%) were abnormal. One case with hypotension was not managed appropriately. Eighteen (56%) patients had their blood pH analysed and 6 were abnormal. None of these were managed appropriately. Thirty (93.7%) EKG assessments were done. Only 17 (56.6%) were recorded. Five (29%) printouts could be found within the files. Of these 4 (80%) had an abnormal tracing but had not been treated. Of those EKGs only documented, 3 (25%) were described as abnormal but were managed inappropriately. Treatment with bicarbonate was either omitted or done inappropriately and without monitoring. The level of consciousness of 31 (96%) patients was recorded. Three who required intubation were not intubated.

Conclusion: The management of TCA overdose did not meet the standards prescribed by GEM net in our sample. This audit had a number of limitations but was used to improve the management of this condition in our unit and may be useful to others.

Biography

Andreas Engelbrecht is the Head of Emergency Medicine at the University of Pretoria/Steve Biko Academic Hospital. He completed his MBChB degree from the University of Pretoria. His other qualifications include FCEM, MMed (Fam. Med.), Dip PEC, DA, DTM&H and MMed. in Pharmacology. He is the Director of Emergency Medicine at the University of Pretoria. He has published more than 13 papers in reputed journals and chapters in emergency medicine textbooks. He developed the VAPP course (Venomous Animals Poisonous Plants) and the Pearls and Pitfalls in Emergency Medicine.

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