Pharmacological Reports
2007, 59, suppl. 1, 226–231
ISSN 1734-1140

Administration of acetylcholinesterase inhibitors for central anticholinergic syndrome in pediatric poisoning

Kinga Niewińska[1], Przemysław Niewiński[2], Janusz Sokołowski[1], Wanda Poradowska-Jeszke[3], Anna Sokół-Ossowicz[3], Anna Wiela-Hojeńska[2]

[1]Department of Emergency Medicine, Wrocław Medical University, Bujwida 44a, PL 50-345 Wrocław, Poland

[2]Department of Clinical Pharmacology, Wrocław Medical University, Bujwida 44, PL 50-345 Wrocław, Poland

[3]Lower Silesian Paediatric Centre, Kasprowicza 64/66, PL 51-137 Wrocław, Poland

Correspondence: Kinga Niewinska, e-mail: kinga@kn.pl

Abstract:
Initial management of patients with anticholinergic syndrome can at times be challenging either in pre-hospital and in-hospital setting. They are often agitated, aggressive, disorientated, uncooperative and their management may be very difficult. Physostigmine has been used as a specific antidote for anticholinergic poisoning, but due to the potential toxicity of the drug itself, its administration is restricted to carefully selected cases. General emergency management of patients with antimuscarinic toxicity is based on proper diagnosis and supportive therapy. In some instances, application of intensive therapy means is necessary. We review 28 pediatric cases of toxic ingestion of *Datura stramonium* seeds, leading to clinically diagnosed anticholinergic syndrome, and discuss the accuracy and efficiency of the applied pharmacotherapy.

Key words:
poisoning, acetylcholinesterase inhibitors, anticholinergic syndrome, neostigmine, physostigmine