

# Moxonidine intoxication: First child case

## Moksonidine zehirlenmesi: İlk çocuk olgu

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### Abstract

During childhood, morbidity and mortality from acute poisoning still continue to be an important issue. In our country the risk of poisoning increases as young children are frequently left alone at home, and drugs are kept in places easily reached by children. The swallowing of toxic substances occurs mostly in children aged between 1-5 years, as at that age children's awareness of their environment increases. They are active and curious. If drugs and chemical substances are kept in places where children can easily reach them, there will inevitably be bad results of this carelessness and thoughtlessness. The subject of poisoning is highlighted by this case of a child with moxonidine intoxication.

**Key word:** moxonidine, intoxication, child

### Özet

Çocukluk yaşlarında, akut zehirlenme sonrasında morbidite ve mortalite halen önemini korumaktadır. Ülkemizde çocuklar evde tek başına kaldıklarında ve ilaçlar çocukların erişebileceği yerlerde olduğunda zehirlenme ihtimalleri artmaktadır. Zehirli maddelerin yutulması çevreye karşı olan ilgilerinin artmasından dolayı özellikle 1-5 yaş arasındaki çocuklarda olmaktadır. Bu yaşlarda aktif ve meraklıdırlar. Eğer ilaçlar ve kimyasal maddeler onların kolayca ulaşabileceği yerlerde bulunursa bu dikkatsizlik ve ihmali sonucu kötü sonuçlar doğması kaçınılmazdır. Zehirlenme konusu bir çocukta moksonidin zehirlenmesi vakası eşliğinde irdelenmiştir.

**Anahtar kelimeler:** moksonidine, zehirlenme, çocuk

### Introduction

The swallowing of toxic substances occurs mostly in children aged between 1-5 years as at that age children's awareness of their environment increases. They are active and curious. If drugs and chemical substances are kept in places where children can easily reach them, there will inevitably be bad results of this carelessness and thoughtlessness.

From all cases of poisoning about 40% occur during childhood (1). Paracetamol and amitriptyline rank top of the list in terms of the drugs causing poisoning most frequently(2). Moxonidine is a centrally acting alfa 2 adrenergic receptor agonist used as an antihypertensive (3). To the best of our knowledge, moxonidine poisoning has not been reported in literature. We report here a case of moxonidine poisoning which presented at our clinic.

### Case

It was stated that a three-year-old girl had taken 5 tablets whose active substance was moxonidine (Physiotens 0.4 mg 28 pill. Pharmaceutical Company: Solvay, Cynt 0.4 mg 30 pill, Lilly). It was established that she had not taken any other medication apart from the moxonidine. Fifteen to twenty minutes after taking the drug, she lost consciousness and was taken to the emergency department of the children's hospital. Gastric irrigation was applied then the patient was transferred to our clinic. Physical examination showed arterial tension of 100 / 70 mmHg and pulse 112 beats per minute. The general condition was bad with loss of consciousness. Deep tendon reflexes could not be taken. Other

system examinations were normal. Fluid support was given. Pathology was not determined in the blood analysis and the patient regained consciousness. After four hours of clinical observation the vital signs returned to normal. The case was taken for polyclinic follow-up. No additional diagnosis was determined.

### Discussion

During childhood, morbidity and mortality from acute poisoning still continue to be an important issue(4,5). In our country the risk of poisoning increases as young children are frequently left alone at home, and drugs are kept in places easily reached by children. Salicylate, acetaminophen and anti depressives are the usual culprits for drug poisoning (4,6,7). Moxonidine is a centrally acting alfa 2 agonist antihypertensive agent. The most common side effects are sedation, depression and xerostomia (3). To the best of our knowledge, moxonidine poisoning has not been reported in literature. Fifteen to twenty minutes after taking the drug, the child lost consciousness. There being so few side effects of this drug might have been an important chance for this child. Every child may not be so lucky.

Families, physicians and drug manufacturers should be sensitive to preventable morbidity and mortality in the most frequent reasons for poisoning and they should take the necessary security precautions so as to reduce to a minimum the risk of poisoning that children may face. In order to prevent non-optional poisoning, drugs must be packaged in such a way that children can not open them and they should be stored in an appropriate manner.

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### References

- 1) Rodgers GC, Matyunas NJ. Poisonings: Drugs, chemicals, and plants. In: Behrman RE, Kliegman RM, Jenson HB, editors. Nelson Textbook of Pediatrics, 17th ed. W.B. Saunders, Philadelphia 2004; 23:62-74.
- 2) Genc G, Sarac A, Ertan U, et al. Ascending Danger in Childhood Intoxication: Amitriptyline. Firat Medical Journal 2007;12: 41-43
- 3) Schwarz W, Kandziora J. Long-term

- experiences with moxonidine, a new antihypertensive agent. Fortschr Med 1990; 10:616-20.
- 4) Yavuz S, Aydin S. The profile of the poisoned cases. The Turkish Journal of Toxicology, 2003; 1: 47-52.
- 5) Kecek Z, Yavuz Y, Kurtoglu S, et al. A two year evaluation of pediatric poisoning cases presenting to our pediatric emergency department. Turkish Journal of Emergency

Medicine 2002; 2: 33-35.

- 6) Agin H, Calkavur S, Balim H, et al. Tricyclic Antidepressant Intoxication in Children. The journal of the child 2004; 4: 46-50.
- 7) Oner N, Vatansever U, Turan C, Karasalihoglu S, et al. A Common Intoxication In Childhood: Amitriptyline Intoxications. Turkiye Klinikleri J PEDIATR 2004, 13:123-128.