



ERRONEOUS INTRAVENOUS INJECTIONS

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INTRODUCTION

Erroneous intravenous injection of the wrong drug or of drugs not intended for intravenous use is a rare event. Poison centers are sometimes asked to perform a risk evaluation after erroneous intravenous injections. This poster gives an overview of the calls received over 10 years (2006-2015) at the Belgian Poison Centre.



2006-2015

Total of calls to the poison centre: 437.371

Calls wrong drugs: 134 (0,03 %)

TYPE OF DRUG

Drugs not for IV: 113
Wrong IV drug: 21

VICTIMS

Adult: 72
Children: 55
Animals: 7 (4 dogs, 1 cow, 1 horse)

CASES WITH FOLLOW-UP SYMPTOMS

None: 21
Minor: 6
Moderate: 3
Major: 2

FREQUENCY OF DRUGS

Promethazine	8
Methylprednisolone	7
Ranitidine	7
Paracetamol	5
Amoxicillin	4
Tranexamic acid	4
Lidocaine	4
Ceftriaxone	3
Amoxicillin/Clavulanate	3
Levetiracetam	3
Olanzapine	3
Salbutamol	2
Chlorhexidine	2
Chloral hydrate	2
Thiamfenicol	2
Saccharomyces	2
Levodropropizine	2
Laxative	2
Octreotide	2
Tuberculin	2
Others	65
Total	134

TWO CASES WITH MAJOR SYMPTOMS

CASE 1: A two years old child received 5 ML Amoxicillin/Clavulanate syrup intravenously. The child developed a hypotensive shock with 50/30 mmHg blood pressure and a high temperature of 39,3 °C. A start dose of Dobutamine was given, followed by an infusion at a rate of 10 µg/kg/min. The infusion could be stopped after 6.5 hours. There were no residual effects.

CASE 2: The second case with major symptoms was a 71 y. old man who received Vitamin D intravenously. He developed chest pain, dyspnea, cyanosis and hypotension. He was treated symptomatically and had no more symptoms the next day. While the Vitamin D drug contains arachis oil a thoracic scan was performed. There were no emboli visible.

Problems which can be encountered with erroneous intravenous injections are a rapid rise of serum concentrations of the involved drug, effects of excipients/drug additives not intended for intravenous use, oil-based medication (fat emboli), suspension (formation of micro emboli) and infection risk. Suitable animal data or comparable case reports are most of the time not available. This makes risk evaluation difficult. For 71 of the 85 different drugs we could not find any comparable cases in literature.

CONCLUSION

Although a rare event erroneous intravenous injections can have serious consequences. To help Poison Control Centers to give a quick and adequate advice, sharing of experience in an international database would be a welcome tool for these centers.



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