



Severe cardiovascular collapse with fatal outcome following intramuscular ranitidine hydrochloride

Gupta Sunanda ¹, Rathore Pratibha ² Raiger Lalit Kumar ³

Department of Anesthesiology, R.N.T. Medical College, Udaipur - 313001.

Key words : ranitidine, cardiac arrest

Introduction

H₂ receptor antagonists are routinely used as prophylaxis for acid aspiration ¹. We report an obese 85 kg woman scheduled for abdominal hysterectomy, who received a preoperative intramuscular dose of 50 mg ranitidine which was followed by severe cardiovascular collapse and death.

Case report

A 51 year old woman weighing 85 kg with a height of 154 cm was scheduled for elective abdominal hysterectomy for fibroid uterus. One hour before surgery, she received an intramuscular injection of 50 mg ranitidine hydrochloride in the preoperative ward. Thirty minutes later she complained of dyspnea, chest pain and restlessness. On examination she had swelling on her face and tongue. Her radial pulse was not palpable and blood pressure was not recordable. She was immediately given an intravenous injection of ephedrine hydrochloride 15 mg, chlorpheniramine maleate 10 mg, epinephrine 2 mg, atropine 1.2 mg and hydrocortisone sodium succinate 200 mg. During endotracheal intubation, edema of the epiglottis as well as the vocal cords was seen. Despite all resuscitative measures and subsequent attempts at revival by

the cardiac arrest team, she could not be revived.

Discussion

Routine use of H₂ antagonists for premedication is not recommended in elective surgery. Premedication with H₂ antagonists, may however be beneficial for prevention of aspiration pneumonia in patients prone to gastric aspiration, such as those with full stomach, obesity and pregnancy.

Due to the fatal outcome in the preoperative ward in this woman, the histamine release test, the specific IgE tests and the cell antigen stimulation test could not be carried out. Radioallergobasorbent test (RAST) for ranitidine was not available in our institution.

There have been reported incidences of anaphylactoid reaction to ranitidine ^{2,3} but to our knowledge there are no reported cases with a fatal outcome.

Although ranitidine has been widely prescribed as premedication in obstetrics and in high risk patients, it is very important to be vigilant especially with parenteral administration.

Paper received on 13/11/2004 ; accepted on 11/02/2005

Correspondence :
Dr. Sunanda Gupta
Dilshad Bhawan
69, Chetak Circle
Udaipur 313 001
Rajasthan (India)
Email : sunandagupta@hotmail.com

References

1. Engelhardt T, Webster NR. Pulmonary aspiration of gastric contents in anaesthesia. Br J Anaesth 1999;83:453-60.
2. Kaneko K, Maruto H. Severe anaphylactoid reaction to ranitidine in a parturient with subsequent fetal distress. J Anesth 2003;17:199-200.
3. Barry JES, Madan R, Hewitt PB. Anaphylactoid reacton to ranitidine in an obstetric patient. Anaesthesia 1992;47:360-1.