Editorial: The Fen-Phen Controversy
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Citation

Abstract

The “Fen-Phen (fenfluramine-phentermine) issue” has recently received considerable attention in the media. No day passes without new anecdotes or real stories covering these drugs. Now, Wyeth-Ayerst Laboratories, producer of Pondimin and Redux pulled the drugs from the market. What is the story behind these controversial drugs, what can the anesthesiologist learn from it - and, can it happen again? Fenfluramine alters serotonin metabolism in the brain. Phentermine interferes with the pulmonary clearance of serotonin which may explain its association with primary pulmonary hypertension. We published our first online article on this topic in January 1997 (Oeser DE: Fenfluramine Anorexients and Anesthesia. The Internet Journal of Anesthesiology 1997; Vol1 N1: http://www.ispub.com/journals/IJA/Vol1N1/articles/dietpill.htm. Published January 1, 1997, Last Updated September 17, 1997). In the present issue of The Internet Journal of Anesthesiology a second article covering the same topic is made available online (Jeffers L: Anesthetic Considerations for the New Anti-Obesity Medications. The Internet Journal of Anesthesiology 1997; Vol1N4: http://www.ispub.com/journals/IJA/Vol1N4/fenphen.htm; Published October1, 1997; Last Updated October 1, 1997). Our main concern was to inform anesthesiologists and anesthetists about potential dangers of these drugs in combination with anesthesia.

In 1977, a single article appeared in the literature discussing a case report of a 23-year-old female admitted for elective dental surgery. She was known to have been taking her husband’s fenfluramine up to the day prior to surgery. She was induced with thiopentone followed by suxamethonium and maintained on oxygen, nitrous oxide, and 2% halothane. Five minutes after induction, she became pulseless, cyanotic, and developed signs of acute pulmonary edema. She failed to respond to resuscitative measures including internal cardiac massage. This case, the occurrence of pulmonary hypertension associated to fen-phen and some anecdotal stories of cardiovascular instability during anesthesia in patients taking dietpills resulted in several articles covering this topic. The conclusion was made to discontinue the medication 1 to 2 weeks prior to surgery. But many patients on the fen-phen regime might have neglected to include the fenfluramine and phentermine in their list of prescribed medications during the pre-operative interview. They may not admit to taking these medications because of the stigma attached to obesity medications. In 1996, the total number of prescriptions in the United States for fen-phen exceeded 18 million! Some of these patients certainly had surgery. I don’t recall an extraordinary amount of complications being reported in the anesthesia literature. Did we just not realize the problems or were the complications caused by fen-phen in combination with anesthesia not that common?

On September 17, 1997, Pondimin (fenfluramine hydrochloride) and Redux (dexamfetamine hydrochloride) have been pulled off the market by Wyeth-Ayerst Laboratories. Increased concerns about health problems caused by the dietpills forced the pharmaceutical company to voluntarily retrieve the drug from the pharmacy shelves. Class-action suits are filled in Houston, Baltimore and San Francisco against several pharmaceutical companies. This “chain reaction” started last year with several articles in the print media describing the possible danger of pulmonary hypertension caused by the “dietpills”. Several anesthesia societies issued a statement to their members to be aware of potential problems with the combination of fenfluramines and anesthesia. This lead us to publish our first article on dietpills and anesthesia in January 97. On August 29, 1997, an article on “Valvular heart disease associated with fenfluramine-phentermine” was published in The New England Journal of Medicine. Twenty-four women receiving the dietpills for 12.2 +/- 6.8 months demonstrated echocardiographic abnormalities, i.e. regurgitation on either
the aortic, mitral and/or tricuspid valve. Connolly et al. concluded that fen-phen therapy had important implications regarding valvular heart disease. Alterations in circulating serotonin may be the cause of the valve injury. Print media reports from Florida indicate that there might be more cases of valvular diseases caused by diet pills. Several law suites were initiated. All of this was followed by the announcement of Wyeth-Ayerst Laboratories to remove the drug from the market.

Is this the end of the story for the anesthesiologist? Probably not. Obesity will still be called the number one public health problem in America. The risk-benefit ratio of these drugs will have to be re-evaluated. However, diet pills may reappear on the market in the near future. Will increased awareness of the public in regard of side effects of fen-phen lead to better disclosure of such medication? Or will hype and modern day pressure to be fashionable thin at all costs override any cautions again? Let’s wait and see.

In the meantime, we would like to offer further information for the anesthesiologic community. Please check our articles “Diet pills and Anesthesia” and “Anesthetic Considerations for the New Anti-Obesity Medications”.

References
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