

Letter

Bronchospasm and laryngeal stridor as an adverse effect of oxytocin treatment

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Oxytocin is frequently used worldwide. Some of its adverse effects are well known, but bronchospasm and laryngeal stridor as anaphylactoid reactions have not yet been reported.

Oxytocin is a synthetically prepared hormone that stimulates contractions of uterine smooth muscle and it is used for induction and augmentation of labor as well as in abortions. Adverse effects reported with oxytocin include reflex tachycardia, hypotension, electrocardiographic changes, increased cardiac output, myocardial infarction, alteration in fetal heart rate, seizures, headache, memory impairment, cerebrospinal bleeding, hyponatremia, syndrome of inappropriate antidiuretic hormone secretion, nausea and vomiting, uterine rupture, neonatal hyperbilirubinemia, and anaphylaxis [1]. To our knowledge, bronchospasm and laryngeal stridor occur very rarely in oxytocin anaphylaxis.

A 41-year-old woman was admitted to our intensive care unit after having a septic abortion in the 18th week of pregnancy. This was her second gestation (the first culminating in a cesarean section). After abortion she presented with septic shock, oligoanuria, consumption coagulopathy, and respiratory insufficiency.

She was first treated intravenously with crystalloids, colloids, inotropics, furosemide perfusion, empirical antibiotics (i.e. cefotaxime, metronidazol, and doxycycline), and frozen fresh plasma. She was anticoagulated with low-molecular-weight heparin. She also received an intravenous infusion of oxytocin at 40 mU/min. Just after infusion, she showed signs of tachypnea, bronchospasm, and laryngeal stridor. We immediately started treatment with β_2 agonist drugs. Thirty minutes later the patient showed slight improvement, but symptoms only disappeared when oxytocin was withdrawn. The patient's condition improved rapidly and recovery was uneventful. She had had no previous allergic reactions or asthma.

Anaphylactoid reactions to oxytocin have been described in the literature [2]. Some of the clinical presentations of oxytocin anaphylactoid reactions described include patchy erythema, hypotension, bronchospasm, and reduced oxygen saturation [3,4]. A case of life-threatening respiratory distress following the use of oxytocin during cesarean delivery was reported in 1994; the authors of that report also suggested that this was an anaphylactoid reaction to synthetic oxytocin [5]. In the case described here, the close temporal relationship between oxytocin administration and bronchospasm and laryngeal stridor, and the rapid abatement of symptoms following oxytocin withdrawal suggest that the relation was a causal one and that the patient had suffered an anaphylactoid reaction.

Competing interests

None declared.

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