LETTERS TO THE EDITOR

Informed Consent for Sugammadex and Oral Contraceptives: Through the Looking Glass

To the Editor

letter to the editor regarding sugammadex and informed consent. While well intended, their assertion "a similar potential risk exists with the administration of common perioperative antibiotics" in terms of effect on contraceptive effectiveness is a misconception held by too many physicians. In fact, rifampin and rifabutin are the only antibiotics demonstrated to affect the metabolism of combined hormonal or progestin-only contraceptives. This is evidenced by World Health Organization recommendations² regarding broad-spectrum antibiotics and hormonal contraceptives, as well as recent reviews in the obstetrics literature.³ Luckily, neither rifampin nor rifabutin is in common use perioperatively.

The more salient issue at hand is the use of sugammadex in women of childbearing age, many of whom take hormonal contraceptives. In vitro studies have demonstrated the ability of sugammadex to bind progestogen, and likely render that day's dose of hormonal birth control ineffective. This is the equivalent of a missed contraceptive dose. This then necessitates our patients use a nonhormonal birth control method for the next 7 days, which in turn requires the documentation of said recommendation. Discussions on this topic have focused on informed consent and appropriate documentation of this risk. What if we took a step back?

The approval of sugammadex has led to its widespread use—in our institution, I have encountered second-year anesthesia residents (CA-1s) who have never prepared a dose of neostigmine and glycopyrrolate. Admittedly, sugammadex is a highly effective and reliable agent. When used in the appropriate situation, it is fantastic, especially for emergency reversal of high doses of rocuronium. However, we must be cautious and not let sugammadex's ubiquity and ease lull us into complacency. As female anesthesiologists who have utilized hormonal birth control, we try to do for our patients what we would appreciate someone doing for us—look at the big picture.

Women in their teens and 20s are about twice as likely as older women to have an unintended pregnancy while using birth control, usually due to forgetting or mistiming their oral contraceptives. These patients are the same ones we are most concerned about providing informed consent to regarding sugammadex and hormonal birth control. Realize that a teenager or young adult presenting for same day surgery with parents in tow is unlikely to be forthcoming regarding contraceptive use. This lack of disclosure does not make us any less responsible to provide them with a safe and uncomplicated anesthetic. At the same time, the fact that they or their parents signed a consent form that frees us from litigation does not free us from the responsibility to be wise clinicians. Why needlessly increase the potential for unplanned pregnancy?

So long as neostigmine and glycopyrrolate are available and not prohibitively expensive, we should make a point in our practice to not use sugammadex for rocuronium reversal in women of childbearing age in situations where neostigmine and glycopyrrolate will have equal effectiveness. Ask yourselves the question we put to our residents:

"Why complicate a patient's life to simplify your own?"

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REFERENCES

- 1. Corda DM, Robards CB. Sugammadex and oral contraceptives: Is it time for a revision of the anesthesia informed consent? *Anesth Analg.* 2018;126:730–731.
- 2. World Health Organization. *Medical Eligibility Criteria for Contraceptive Use.* 5th ed. Geneva, Switzerland: WHO; 2015.
- 3. Simmons KB, Haddad LB, Nanda K, Curtis KM. Drug interactions between non-rifamycin antibiotics and hormonal contraception: a systematic review. *Am J Obstet Gynecol*. 2018;218:88–97.e14.
- Kost K, Singh S, Vaughan B, Trussell J, Bankole A. Estimates of contraceptive failure from the 2002 National Survey of Family Growth. Contraception. 2008;77:10–21.

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