

Conflicts of interest

The authors declare no conflicts of interest.

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Reply to the letter to the editor — anesthesia for cesarean delivery in a patient with Klippel-Trenaunay syndrome[☆]

Resposta à carta ao editor — anestesia para parto cesáreo em paciente portadora de síndrome de Klippel-Trenaunay

Dear Editor,

Initially, we are grateful for the appreciation of our study.¹ Although spinal block is the gold standard technique for obstetric anesthesia, in the case described by Avelar Teixeira et al.¹ it was decided to perform general anesthesia as justified and described in the discussion section of that article: the patient had Klippel-Trenaunay syndrome (TTS), with a previous history of two anterior cesarean sections under spinal anesthesia with severe bleeding and hemodynamic instability, which required blood transfusion. At clinical examination, she presented with cutaneous hemangiomas mainly in the trunk and lumbar region and no imaging exam had been performed to evaluate the neural axis that could rule out the presence of vascular malformations in this region.

Given this situation and knowing the possibility of cutaneous hemangiomas association with vascular malformations in the neural axis and consequent risk of vascular trauma in the passage of the needle to the medullary canal, which can result in hemorrhage, hematoma, radicular and medullary compression, and permanent neurologi-



cal injury,² the option was for neuraxial block in this patient. This situation differs from the cases described by Gonnella et al. in which patients had negative lumbar spine magnetic resonance imaging for arteriovenous malformations and made spinal block a safe anesthetic option.

Computed tomography angiography of the abdomen showed an irregular uterus with multiple varicose veins and arterial vessels and bilateral periaxial varicose veins, pointing to a major surgery and heavy bleeding, a possible indication of arterial embolization and probable hysterectomy, with the participation of a multidisciplinary team.

Given all the considerable preoperative and perioperative clinical aspects, and as there were no defined anesthetic techniques in the literature regarding anesthetic planning for obstetric patients with TTS, we opted for general anesthesia because we consider it to be the safest technique for the patient in question.

We believe that these cases should be evaluated individually for the best choice of anesthetic technique, considering all hallmarks found in the spectrum of this syndrome. We are grateful for the letter sent by Gonnella et al., congratulate the authors for their scientific contribution to a rare, extremely relevant topic for obstetric anesthesia.

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- Teixeira CEFA, Braga AFA, Braga FSDS, et al. Anesthesia for cesarean delivery in a patient with Klippel-Trenaunay syndrome. *Rev Bras Anestesiol.* 2018;68:641–4.

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Nasal fiberoptic intubation: what "red out"?



Intubação por fibra óptica nasal: o que é "apagão"?

Dear Editor,

Nasotracheal intubation is an important skill that is unfortunately less practiced nowadays. We were therefore delighted to read about the technique by Rewari et al.¹ on facilitating fiberoptic nasotracheal intubation. We herein suggest a way to bypass the problem of "being in the dark" (referred to as "Red out" by the authors) when passing the fiberscope through the nasopharynx. In our practice, we first pass a warmed/soft and lubricated tracheal tube through a nostril into the supraglottic area prior to passing the fiberscope. In most adults, the tracheal tube would have an internal diameter of 7.0 mm. The average distance at which the tip of the tube would be just at the laryngeal inlet would be 15–17 cm as measured at the ala nasi. For a spontaneously breathing patient, this distance is at which further advancement would result either in successful tracheal intubation, or, as is more often the case, loss of exhaled air through the tube. It is at this point when we pass the fiberscope within the lumen of the tracheal tube. At the same depth of insertion, the larynx is sometimes immediately in the fiberscope view, at which point the fiberscope is advanced further into the trachea. If the larynx does not immediately come into view, the fiberscope tip could either be manipulated accordingly, or 20–30 mL of air is injected into the tracheal tube cuff, if present, to elevate the tip of the tube such that it points to the larynx. During cuff inflation, the operator keeps an eye on the fiberscope view and the larynx often becomes visible at which point the inflation of the cuff stops and the fiberscope is advanced into the trachea. This technique is easy to execute and does not have the drawback of having to guide the fiberscope pass the dark passage of the upper respiratory tract.

Furthermore, we respectfully disagree with the authors that "awake nasal fiberoptic intubation is the technique of choice in an anticipated difficult airway". While we agree that awake fiberoptic intubation remains the ultimate technique for difficult intubation, even in the current era of videolaryngoscopy, orotracheal (rather than nasotracheal) intubation remains the preferred technique in most clinical settings.

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