

If there was significant endobronchial hemorrhage and intubation the fiberoptic visualization would be affected, which would compromise the initial positioning of any BB or Double Lumen Tube (DLT). In that case, theoretically, a blind utilization of BB as Arndt blocker™ (Cook Critical Care Inc., Bloomington, IN) or similar (as mentioned by Grocott),<sup>1</sup> Univent™ endobronchial tube (Fuji Systems Corporation, Tokyo, Japan) or DLT could be better options, because the rate that both extremities of EZ Blocker™ enter in the same bronchus at the first attempted is elevated.<sup>3</sup>

The usefulness of the utilization of bronchial blockers, placed blindly, namely the Univent™ endobronchial tube, for the tamponade of endobronchial hemorrhage has been reported.<sup>1</sup> However, there is no significant evidence comparing the success rate of the first passage between different bronchial blockers, namely when their insertion is performed blindly. Despite Grocott et al.<sup>4</sup> have shown that, comparing with DLT, the Arndt Blocker™ took a similar amount of time to provide lung isolation in mini-thoracotomy cases, a systematic meta-analysis has shown that in lung isolation cases, DLT are placed quicker and more reliably than BB (in general).<sup>5</sup>

It is also important to emphasize that most of the authors strongly recommend that bronchoscopy is used in lung isolation,<sup>3</sup> especially using BB because the rate of malposition is higher. They are not easy to position and frequently dislocate during repositioning and surgical manipulation.<sup>3</sup>

In general, a significant advantage of EZ blockers™ among BB is the less risk of displacement during the procedure, which is related to the anchorage of the bifurcation of blocker on the carina, which makes reposition easier if necessary to optimize the occlusion of the right superior lobe bronchus.<sup>3</sup> This advantage has not been proven, because comparative studies between different BB are lacking, particularly in emergent cases.

In summary, a large SLT may improve ventilation, when a BB under bronchoscopy is used in emergent cases and a predictable technique, even if slightly slower, may be preferable when there is not a bleeding airway distal to glottis. The risk of displacement of BB throughout the case should be the main concern and, on the other hand, the blind first passage success rate of the BB would be irrelevant in this case.

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## Conflicts of interest

The author declares no conflicts of interest.

## References

1. Grocott H. Lung isolation for emergent thoracotomy in the bleeding airway patient: the choice of bronchial blocker may make a difference. *Rev Bras Anesthesiol.* 2019;69:113.
2. Almeida C, Freitas MJ, Brandão D, et al. Use of bronchial blocker in emergent thoracotomy in presence of upper airway hemorrhage, and cervical spine fracture: a difficult decision. *Rev Bras Anesthesiol.* 2018;68:408–11.
3. Mourisse J, Liesveld J, Verhagen A, et al. Efficiency, efficacy, and safety of EZ-blocker compared with left-sided double-lumen tube for one-lung ventilation. *Anesthesiology.* 2013;118:550–61.
4. Grocott HP, Darrow TR, Whiteheart DL, et al. Lung isolation during port-access cardiac surgery: double-lumen endotracheal tube versus single-lumen endotracheal tube with a bronchial blocker. *J Cardiothorac Vasc Anesth.* 2003;17:725–7.
5. Clayton-Smith A, Bennett K, Alston RP. A comparison of the efficacy and adverse effects of double-lumen endobronchial tubes and bronchial blockers in thoracic surgery: a systematic review and meta-analysis of randomized controlled trials. *J Cardiothorac Vasc Anesth.* 2015;29:955–66.

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## Wide-Awake Local Anesthesia and No Tourniquet (WALANT) in open thumb fracture under antithrombotic therapy: overcoming an impasse



## Anestesia Local com o Paciente Totalmente Acordado e Sem Torniquete (WALANT) em fratura exposta de polegar sob terapia antitrombótica: superando um impasse

Dear Editor,

Performing digital blocks with epinephrine is a matter of debate,<sup>1</sup> but there is considerable evidence that supports

the tenet that properly used epinephrine in the fingers is not unsafe.<sup>2</sup> We report a case where a digital block with epinephrine helped us to overcome an “impasse”.

A 53 years old patient had an occupational accident. He presented an open fracture of the distal phalanx of the thumb with a large dorsal linear wound next to the distal interphalangeal joint. Just before entering the OR he presented a chest pain and an acute myocardial infarction was diagnosed. The operation was postponed and a transradial coronary angiography immediately performed under dual platelet therapy (ticagrelor, acetylsalicylic acid) and enoxaparin. The mid right coronary artery was approximately 90% blocked and was treated by thromboaspiration, dilatation and intracoronary injection of eptifibatid. Unfortunately 6 h later he relapsed and a stent was then inserted. The

triple antithrombotic therapy was continued in the ICU and as a result a permanent bleeding was observed leading to blood transfusions. The operation was performed 24 h later under WALANT technique with the patient's consent. We injected 10 mL of 2% lidocaine with 1:200,000 epinephrine at the root of the thumb in the volar aspect and 5 more in the proximal vicinity the dorsal wound. Bleeding stopped promptly and percutaneous pinning and suture were then performed. No rebleeding was observed and analgesia lasted 10 h. No further complication occurred under dual platelet therapy.

WALANT is spreading worldwide and is a new concept of regional anesthesia in hand surgery.<sup>3</sup> Its corner stone is the use of epinephrine associated with lidocaine injected subcutaneously in the surgical field and in the fingers if needed. It provides locally efficient exsanguination and makes it possible to perform the surgical procedures without using a pneumatic tourniquet, in addition the hand motricity is respected unlike brachial plexus block.

In case of surgery the decision regarding whether or not to interrupt or even reverse antithrombotic treatment will depend on the specific clinical situation, but also on the indication for the antithrombotic treatment. Current recommendations concerning the perioperative management of patients with coronary stents indicates that non-urgent surgery should be postponed until the end of the period of susceptibility to stent thrombosis. There are no guidelines concerning the management in case of recent infarction and limited data concerning bleeding in the setting of antiplatelet therapy. Administration of platelet concentrate is probably the best way to correct the hemostatic defect.<sup>4</sup> Furthermore epinephrine could potentiated ADP-induced platelet aggregation and activation in ticagrelor-treated patients.<sup>5</sup>

Thus we hypothesize that the transient vasoconstriction and the local action of epinephrine on the platelet aggregation were sufficient to achieve durable hemostasis. WALANT technique is certainly a safer alternative than general or regional anesthesia in the setting of acute myocardial infarction, and makes it possible to cope with a

local bleeding without modifying a mandatory antithrombotic therapy.

## Conflicts of interest

The authors declare no conflicts of interest.

## References

1. dos Reis Júnior A, Quinto D. Digital block with or without the addition of epinephrine in the anesthetic solution. *Braz J Anesthesiol.* 2016;66:63–71.
2. Thomson CJ, Lalonde DH, Denkler KA, et al. A critical look at the evidence for and against elective epinephrine use in the finger. *Plast Reconstr Surg.* 2007;119:260–6.
3. Lalonde DH. Conceptual origins, current practice, and views of wide-awake hand surgery. *J Hand Surg Eur Vol.* 2017;42:886–95.
4. Hansson EC, Shams Hakimi C, Åström-Olsson K, et al. Effects of ex vivo platelet supplementation on platelet aggregability in blood samples from patients treated with acetylsalicylic acid, clopidogrel, or ticagrelor. *Br J Anaesth.* 2014;112:570–5.
5. Singh S, Malm CJ, Ramström S, et al. Adrenaline enhances in vitro platelet activation and aggregation in blood samples from ticagrelor-treated patients. *Res Pract Thromb Haemost.* 2018;2:718–25.

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## Global trend on reducing clear fluids fasting time in children: declaration of the Pediatric Anesthesia Committee and the scenario in Brazil



### Tendência mundial de redução do tempo de jejum de líquidos claros em crianças: declaração do Comitê de Anestesia em Pediatria e o cenário no Brasil

Dear Editor,

According to the Preoperative Fasting Guidelines of American Society of Anesthesiologists updated in 2017, the recommendation for clear fluids fasting in children is 2 h.<sup>1</sup> These orientations were made based on systematic reviews of literature, considering the primary objective of reducing

pulmonary aspiration, although this risk is known to be very low in healthy children,<sup>2</sup> and the harm resulted from aspiration of clear liquid is very rare.<sup>3</sup>

The APRICOT study<sup>2</sup> demonstrated a risk of aspiration of 9.3/10000, and none of these children presented serious complications. A recent study from Children's Hospital of Philadelphia<sup>4</sup> applied a quality improvement methodology to decrease fasting time in children admitted for outpatient procedures. Their main objective was to reduce clear fluids fasting time to less than 4 h allowing children to have clear liquids up to 30 min of arrival at the hospital. They improved their clear fluids fasting time of less than 4 h from 20% to 63% without any event of surgery cancelation or pulmonary aspiration. Considering the American Society of Anesthesiologists guidelines, this study was the first in the USA to allow 1-h clear fluids fasting in children.

For the anesthesiologists who have their majority of practice with children, is not uncommon to face patients with