Bedside tracheostomy: practical considerations

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We congratulate Perfeito et al." on the publication of their original article in the final 2007 edition of the Brazilian Journal of Pulmonology, and we share their opinion on conventional bedside tracheostomy: it is feasible and safe. Our experience with this technique is similar to that described in their article. In our study, also published in 2007, we found that only 24 (4.3%) of the 552 patients studied presented complications.¹² We concluded that tracheostomy can be safely performed at the bedside, even in patients presenting factors previously described as contra-indications to tracheostomy out of the operating room: obesity; advance age; spinal trauma; etc. In addition, we analyzed other variables, such as mean time of the procedure (19 min) and estimated cost of the procedure in Brazil (253 USD and 494 USD, respectively, for the open and percutaneous techniques performed in the ICU versus 496 USD for the open technique performed in the operating room).

We also share the concern expressed by Perfeito et al. regarding the importance of training residents, which should be an objective of a teaching hospital. Since it is a simple surgical procedure, tracheostomy is frequently delegated to less experienced surgeons, without the necessary supervision. In a limited-resource environment, this lack of experience can have undesirable consequences, ranging from an unnecessary increase in surgical time, which is wearisome to the support team - not accustomed to surgical difficulties - to more disastrous complications, principally those related to the need to maintain ventilatory support. Undoubtedly, supervision by a surgeon who is experienced in manipulating airway access is crucial to ensuring the safety of the procedure and obtaining favorable outcomes.

However, in this context, the principal aspect that must be borne in mind is that the ICU is a dynamic and multidisciplinary environment. Therefore, the teams of intensivists, nurses and physical therapists should actively participate in the process. A lack of knowledge often leads to resistance to the implementation of the method. Therefore, continuing education is essential so that everyone feels secure and comfortable with performing tracheostomy in this environment. A strict protocol, known by all those involved in the process, should be established and followed, according to the conditions and peculiarities of each institution. Patients with severe disease present little tolerance for periods of apnea and are therefore at great risk during transport, as well as during tube exchange, especially when the procedure is performed by a poorly trained team. Therefore, bedside tracheostomy is often, albeit sporadically, performed in such patients. However, rather than being recommended only in severe cases, bedside tracheostomy should be a routine procedure in the ICU. The following aspects should be included in the protocol: clinical recommendation; consent from the patient or legal guardian; material; necessary human resources; surgical technique; and postoperative care (correct fixation of the tube, cuff pressure, follow-up evaluation up to the time of decannulation, etc.) These premises considered, we second Perfeito et al., whom we congratulate for raising such an important issue. We believe that conventional tracheostomy can be safely performed at the bedside, and that it constitutes an appropriate option for patients requiring prolonged mechanical ventilation.

References


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