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CLINICAL INFORMATION

Intraoperative echocardiography guidelines in Brazil – Is it time for a task force?



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KEYWORDS

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Abstract

Background and objectives: The Brazilian Society of Anesthesiology (SBA) has been promoting continuing education in intraoperative echocardiography in Brazil since 2011, with the implementation of an Intraoperative Echocardiography Course (ETI/SBA). Although echocardiography is a reality of anesthesiology practice in Brazil, we still do not have an established policy on the area of expertise, job training, and recognition by the other societies, such as the Brazilian Society of Cardiology (SBC). The aim of this paper is to contextualize the anesthesiology in the intraoperative echocardiography in Brazil and promote a discussion on the formation of a Task Force along with the SBC to begin drawing up the Brazilian Guidelines on Intraoperative Echocardiography.

Case report: The first reports on the involvement of anesthesiology in Brazil with intraoperative echocardiography are from the 80s and 90s. However, this technique implementation in routine practice in the Brazilian anesthesiology occurred in 2011 with the formation of the ETI/SBA Course. Since then, the SBA has been promoting a continuing education of its members and disseminating the ETI/SBA Course throughout Brazil. More than 200 associates have taken this course, and the vast majority works with cardiac surgery.

Conclusion: Intraoperative echocardiography is a reality in the practice of the Brazilian anesthesiology, and the ETI/SBA Course has been promoting its continuing education, however, we still do not have a grounded guideline. As occurred in major worldwide centers, we have to promote a Task Force along with the SBC in order to begin the drawing up of the Brazilian Guidelines on Intraoperative Echocardiography.

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PALAVRAS-CHAVE

Ecocardiografia
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Anestesia;
Ecocardiografia
transtorácica;
Ecocardiografia
transesofágica

Diretrizes da ecocardiografia intraoperatória no Brasil – Chegou a hora de uma força-tarefa?**Resumo**

Justificativa e objetivos: A Sociedade Brasileira de Anestesiologia (SBA) vem promovendo a educação continuada em ecocardiografia intraoperatória no Brasil desde 2011, com a implantação do Curso de Ecocardiografia Intraoperatória (ETI/SBA). Apesar de a ecocardiografia ser uma realidade do anestesiológico brasileiro, ainda não temos uma diretriz estabelecida no que diz respeito à área de atuação, capacitação profissional e ao reconhecimento junto às demais sociedades, como, por exemplo, a Sociedade Brasileira de Cardiologia (SBC). O objetivo deste artigo é contextualizar a anestesiologia na ecocardiografia intraoperatória no Brasil e promover uma discussão sobre a formação de uma força-tarefa junto à SBC para iniciarmos a formação das Diretrizes Brasileiras em Ecocardiografia Intraoperatória.

Relato do caso: Os primeiros relatos do envolvimento da anestesiologia no Brasil com a ecocardiografia intraoperatória são da década de 1980 e 90. Contudo, a implantação dessa técnica na prática rotineira na anestesiologia brasileira ocorreu em 2011, com a formação do Curso ETI/SBA. Desde então, a SBA vem promovendo a educação continuada de seus associados e divulgando o Curso ETI/SBA em todo o Brasil. Já fizeram esse curso mais de 200 associados. A grande maioria trabalha com cirurgia cardíaca.

Conclusão: A ecocardiografia intraoperatória é uma realidade na anestesiologia brasileira e o Curso ETI/SBA vem promovendo a sua educação continuada. Contudo, ainda não temos uma diretriz fundamentada. Como ocorreu nos grandes centros mundiais, temos de promover uma força-tarefa junto à SBC a fim de iniciarmos a formulação das Diretrizes Brasileiras em Ecocardiografia Intraoperatória.

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Background and objectives

Intraoperative echocardiography is a reality in major American, Canadian, and European centers since the 1980s.¹ In the 1990s, it acquired great popularization with the appointment of Anesthesiology and Cardiology/Echocardiography Societies Task Forces.¹ This task force has formulated and published the guidelines and examination techniques for intraoperative transesophageal echocardiography. In Brazil, the first anesthesia papers on intraoperative echocardiography date from the 1980s/90s, with two scientific papers by Dr. José Auler presented as free themes in the 1987 and 1994 Brazilian Congress of Anesthesiology.^{2,3}

The aim of this paper is to contextualize anesthesiology in intraoperative echocardiography in Brazil and promote a discussion on the formation of a task force with the Brazilian Society of Cardiology to delineate the Brazilian Intraoperative Echocardiography Guidelines.

Case report

In the 1990s, the United States, Canada, and Europe developed their intraoperative echocardiography guidelines,¹ which promoted a worldwide dissemination of this technique. What these opinion maker centers had in common was the union of the anesthesiology societies with the echocardiography and/or cardiology societies. Thus, they promoted a task force and validated the intraoperative echocardiography performance by trained anesthesiologists. In Brazil, this

technique began in the 1980s/90s. Dr. José Auler presented two scientific papers as free themes in the Brazilian Congress of Anesthesiology in 1987 and 1994.^{2,3} Although we have works dated from the 1980s, there was a widespread continuation of this technology in Brazil between 1990 and 2000. It was through the personal commitment of some anesthesiologists and few hospitals specialized in cardiac surgery that intraoperative echocardiography picked up its development again in Brazil more recently, especially after the American Society of Cardiovascular Anesthesiology (ACS) guidelines and the American Society of Echocardiography (ASE). The ACS/ASE refresher courses were also important to promote this technique in Brazil.¹

Faced with an increasingly growing demand in the Brazilian scenario, the SBA formed a group in 2011 to promote continuing education in intraoperative echocardiography. Thus, the Intraoperative Echocardiography Course of the Brazilian Society of Anesthesiology (ETI/SBA)⁴ is initiated.

The first two courses were based on the ACS/ASE immersion course models. This model was not fit for Brazil, as it was extremely long and often unproductive. So, we began to tailor the course to a model that was closest to the Brazilian anesthesiologist profile. Thus, the ETI/SBA course was divided into two modules: Module I, which introduces the basics of echocardiography, anatomy related to echocardiography, and hemodynamic calculations; Module II, which evaluates ventricular function and valvular pathologies.⁴ With this change, the course became more

palatable and with better acceptance for the Brazilian anesthesiologists. Over four years, 8 Modules I and 5 Modules II were performed.⁴

ETI/SBA course has eight anesthesiologist instructors, in addition to guest echocardiographers. The course structure is based on lectures, laboratory with porcine heart model, realistic simulation mannequin of transesophageal echocardiography with more than 20 diseases, and a transthoracic echocardiography workshop.⁴

Of the 265 anesthesiologists who took the ETI/SBA Course, 233 (88%) works regularly with cardiac surgery and 107 (40%) have the echocardiography machine on their services.⁵ A fact that demonstrates how we need to expand this knowledge in Brazil is that of the 233 anesthesiologists who work with heart surgery, only 77 (33%) use the echocardiogram twice or more during the week in their anesthetic procedures.⁵

The interest and familiarity with echocardiography are continually increasing, and we can see this evolution both by the number of articles published by our associates⁶⁻¹² and the mean ETI/SBA Course evaluations, which has grown every year, and by the number of third-year residents taken the courses that already use the echocardiogram in cardiac and non-cardiac surgery in their Education and Training Centers (ETC).⁵

Conclusion

With the implementation of the ETI/SBA Course and the echocardiogram popularization among anesthesiologists who are in the labor market and training in the ETCs, the first step was taken. However, we must continue to provide because we have to implement a task force with the Brazilian Society of Cardiology so that we can formulate the Brazilian Intraoperative Echocardiography Guidelines in order to provide more safety and quality in anesthesia to our patients in a standard manner.

Conflicts of interest

The author declares no conflicts of interest.

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