43533 - CANADIAN SURVEY ON THE PRACTICE OF REGIONAL ANESTHESIA FOR CARDIAC SURGERY

Philippe Nguyen, PeriCARG, St-Laurent, QC, Canada;

Nicolas Noiseux, University of Montreal;

David Bracco, McGill University;

Ignatio Prieto, University of Montreal;

Thomas Hemmerling, McGill University;

INTRODUCTION: An international survey published in 2001 (1) stated that 7-8% of cardiac centres performing adult cardiac surgery use regional techniques (epidural or spinal anesthesia). This publication was based on a survey undertaken in 1994. We undertook a survey regarding the present use and practice of RA in cardiac surgery throughout Canada.

METHODS: Local IRB approval was obtained for this study. Firstly, a telephone survey was conducted to identify which anesthesiologists use RA in cardiac surgery. Then, a survey was sent via mail or e-mail to these anesthesiologists. Participants were notified that all information was to be kept confidential. The survey contained questions regarding anesthesiologists' practice (used techniques, type of surgery, surgical access, timing of RA vs heparinization, incidence of complications, RA regimens, extubation time), patients' coagulation profile, institutional practice (number of anesthesiologists at site, number of surgeries, number of RA's during previous year), and the anesthesiologists' justification for the use of RA for cardiac surgery (advantages and risk assessments).

RESULTS: The survey was undertaken January – June 2006. Nine out of 41 Canadian cardiac centres use RA. Figure 1 shows the number of centres using different RA techniques. At least 26 Canadian anesthesiologists use RA in cardiac surgery. The majority of centres use RA for off-pump CABG, on-pump CABG, or valve surgery. For anticoagulation management, anesthesiologists mostly followed guidelines given in the 2003 consensus conference paper by Horlocker et al (2). In the event of a bloody tap, anesthesiologists who distinguish blood origin tend to carry on with the procedure if venous blood is encountered, and to postpone surgery if arterial blood is discovered, as proposed by Williams (3). Anesthesiologists who do not distinguish between venous or arterial blood rely on time to heparinization and needle calibre to determine whether or not to postpone surgery. There was no reported case of epidural or spinal hematoma. All of the respondents considered better stress protection as an advantage of RA, 94% superior analgesia, 76% better po. lung function, 82% better myocardial outcome, and 35% faster extubation and recovery as well as better po. renal function in comparison to conventional cardiac anesthesia while a little more than 80% selected the risk of spinal or epidural hematoma as the sole disadvantage to the techniques.

DISCUSSION: About 20% of Canadian institutions where cardiac surgery is practiced have anesthesiologists that use RA for cardiac anesthesia. Therefore, RA in cardiac anesthesia cannot be considered a rarity but has increased since the last survey was undertaken (1). Most centres

use spinal anesthesia, followed by thoracic epidural anesthesia; only two centres use (different) techniques of paravertebral blocks.

REFERENCES: 1 J Cardiothorac Vasc Anesth 2001; 15(2): 158-68; 2 Reg Anesth Pain Med 2003; 28: 172-97; 3 Can J Anesth 2002; 49(6): R1-R6