

anaesthetics. Implications for malignant hyperthermia treatment. *Anaesthesia* 1993; 48:862-5

6. Maccani RM, Wedel DJ, Kor TM, Joyner MJ, Johnson ME, Hall BA: The effect of trace halothane exposure on triggering malignant hyperthermia in susceptible swine. *Anesth Analg* 1996; 82:S287

(Accepted for publication April 29, 2011.)

## Just Who Is Burning Out ... Chairpersons or Program Directors?

*To the Editor:*

Dr. De Oliveira *et al.* recently published an interesting manuscript discussing the apparent high incidence of burnout in academic anesthesiology chairpersons.<sup>1</sup> Risk factors including low job satisfaction and spousal support were discussed at length, and the survey instrument used was attached as an Appendix (pp 189-93).

While reading the article, I began to wonder if similar burnout risks applied to program directors, and I was surprised to see that the Appendix specifically asked questions of program directors, *not* program chairs. I assume that this was either part of a larger survey, or that the wrong Appendix was included with the manuscript; however, I was hoping the authors could comment on their thoughts on program director *versus* chairperson stress and burnout. Furthermore, did the authors receive comments or data from any of the anesthesiologists who serve as both program director and chair in their departments?

**Roy G. Soto, M.D.**, Beaumont Hospitals, Royal Oak, Michigan. roy.soto@beaumont.edu

### Reference

1. De Oliveira GS Jr, Ahmad S, Stock MC, Harter RL, Almeida MD, Fitzgerald PC, McCarthy RJ: High incidence of burnout in academic chairpersons of anesthesiology: Should we be taking better care of our leaders? *ANESTHESIOLOGY* 2011; 114:181-93

(Accepted for publication April 19, 2011.)

*In Reply:*

Thank you for your interest in our article. The data presented<sup>1</sup> were part of sequential series of studies performed independently that evaluated the risk of burnout in department chairs and then program directors and more recently anesthesiology residents. The survey tool for the program director survey was similar to that used for the chair survey except that *faculty* and *resident* were used in place of *resident* and *dean* in place of *chairman* in sections 2 and 4 of the survey and *chair* replaced *program director* throughout.

We found that program directors exhibited burnout to a degree similar to that of chairs, with 52% of the respondents exhibiting moderate to high burnout risk. Risks to the development of burnout in the program directors were slightly

different from those of the chairs and included disputes with the chair and Accreditation Council of Graduate Medical Education dispute issues. It is conceivable that chair burnout could affect the program director responses because burnout in the workplace has been recognized to spread among co-workers.<sup>2</sup> Because the surveys were delinked, we were unable to test the cross-association of chairs and program directors or the potential that the same individual served both roles. We did not receive any comments regarding dual responsibility roles of the respondents and can only speculate that a chair who also serves the role of program director would be facing extreme stressors and could be at a high risk of burnout.

**Gildasio De Oliveira, M.D., Robert J. McCarthy, Pharm.D.\***

\*Northwestern University Feinberg School of Medicine, Chicago, Illinois. r-mccarthy@northwestern.edu

### References

1. De Oliveira GS Jr, Ahmad S, Stock MC, Harter RL, Almeida MD, Fitzgerald PC, McCarthy RJ: High incidence of burnout in academic chairpersons of anesthesiology: Should we be taking better care of our leaders? *ANESTHESIOLOGY* 2011; 114:181-93
2. Hyman SA, Michaels DR, Berry JM, Schildcrout JS, Mercaldo ND, Weinger MB: Risk of burnout in perioperative clinicians: A survey study and literature review. *ANESTHESIOLOGY* 2011; 114:194-204

(Accepted for publication April 19, 2011.)

## Hypoxemia during One-lung Ventilation: Looking the Other Way

*To the Editor:*

Rozé *et al.*<sup>1</sup> discuss the problem of hypoxemia during one-lung ventilation in a very constructive way but omit the option of increasing the concentration of oxygen in the shunt. Their case report illustrates the difficulty that sometimes arises.

If the concentration of oxygen in the shunt is increased, the same shunt causes less arterial desaturation. Because the amount of oxygen is quite small, a small volume, *e.g.*, 50 ml with a low inflation rate, *e.g.*, 6 breaths/min of the nonventilated lung can greatly improve arterial oxygenation. This simple technique was described in 2009 and usually caused marked improvement in oxygenation without disrupting surgery on the nonventilated lung.<sup>2</sup>

**W. John Russell, M.D., Ph.D., F.A.N.Z.C.A.**, Royal Adelaide Hospital, Adelaide, South Australia, Australia. john.russell@adelaide.edu.au

### References

1. Rozé H, Lafargue M, Ouattara A: Case scenario: Management of intraoperative hypoxemia during one-lung ventilation. *ANESTHESIOLOGY* 2011; 114:167-74
2. Russell WJ: Intermittent positive airway pressure to manage hypoxia during one-lung anaesthesia. *Anaesth Intensive Care* 2009; 37:432-4

(Accepted for publication April 26, 2011.)