ANAESTHESIA FOR FREE FLAP SURGERY: WHAT DO ANAESTHESIOLOGISTS THINK?

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1. BACKGROUND

Microvascular free flap surgery is currently the main technique to ensure head and neck cancer reconstruction, improving survival and functional outcomes.¹ Success rate of this surgery has raised mainly due to advancements in the knowledge of the physiology underlining flap survival. Few scientific evidence exists concerning the best anaesthetic practice for this type of surgery. The aim of this study was to characterize current anaesthetic management for free flap head and neck surgery.

2. MATERIAL AND METHODS

A literature review was performed using the terms *free flap*, *anaesthesia*, *head and neck* and *microvascular free tissue*. Posteriorly, we applied a survey sent by e-mail to Portuguese Anaesthesiology Services, between May and December 2017. Results were analysed using Microsoft Excel 2016®.

3. RESULTS AND DISCUSSION

We obtained 29 responses. The majority of the responders (59%) were from the same hospital. Regarding the frequency of anaesthetic practice for free flap surgery, 55% responded they do it on an irregular basis (1 to 2 every 3 months) and only 3% do it on a regular basis ($\geq 1/\text{week}$).

4. DISCUSSION AND CONCLUSIONS

The majority of anaesthesiologists (55%) stated that they anesthetize for this type of surgery on an irregular basis, which is surprising since free flap surgery is usually performed on reference centres, where a more regular practice would be expected. In order to expand plasma volume and raise arterial pressure, most of the responders still prefer the use of crystalloids rather than colloids, even if scientific evidence favors the use of colloids in this context. Another unexpected topic is that only 10% of anaesthesiologists considered vasopressors safe to use in this type of surgery, even if recent evidence suggests that its use is safe, contrarily to what has been published in the past. Anaesthetic management for free flap surgery is controversial. More studies are needed to establish the best evidence-based anaesthetic strategy.

References

1. Gooneratne H, et al. *Acta Anaesthesiol Scand*. 2013;57(10):1293-1300.