

# Results of a moderate sedation program with propofol for transesophageal echocardiography performed by non-anesthesiologist professionals.

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## Abstract

**Introduction and objectives** The advantages of sedation in patients undergoing transesophageal echocardiography (TEE) are well established, but the increasing number of TEE studies may limit the capacity of Anesthesiology services. In this study we analyze the effectiveness and safety of a moderate sedation program carried out by non-anesthesiologist professionals (NAP). **Methods** Descriptive and prospective study that included all consecutive patients undergoing a TEE procedure under moderate sedation by NAP and by anesthesiologists (AP) from September 2018 to September 2019. Patients were selected according to a specific algorithm agreed upon with the Anesthesiology department. We analyze current indications for TEE, complication rates, and recovery times associated with sedation. **Results** We performed 267 procedures in 252 patients (54% male, 69yo). Main indications were screening or monitoring of surgical and percutaneous cardiac interventions (47.9%), endocarditis (28.5%) and stroke (20.6%). Patients in the NAP group were younger (59 vs 71 yo), less hypertensive (43% vs 61%), with less lung disease (4% vs 24%), lower risk of difficult airway (1% vs 22%) and lower comorbidity (ASA scale [?]III 13% vs 77%). Complications were more frequent in the AP group (26% vs 9%), mainly mild respiratory (19% vs 9%). Multivariate adjustment showed events were associated with the presence of lung disease and higher ASA degree. Recovery time was longer in the AP sedation group (20min vs 15min). **Conclusions** TEE indications are changing and involve larger and more complex studies. Moderate sedation with propofol performed by NAP is safe in selected patients, with adequate recovery times.

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**Running head: Propofol TEE sedation for non-anesthesiologists**

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