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**Survey of Ventilator Waveform Interpretation Among ICU Professionals**

**Abstract**

**Background:**The interpretation of ventilator waveforms is essential for effective and safe mechanical ventilation but requires specialized training and expertise. This study aimed to investigate the ability of ICU professionals to interpret ventilator waveforms, identify areas requiring further education and training, and explore the factors influencing their interpretation skills.

**Methods:**We conducted an international online anonymous survey of ICU professionals (physicians, nurses, and respiratory therapists [RTs]), with ≥ 1 y of experience working in the ICU. The survey consisted of demographic information and 15 multiple-choice questions related to ventilator waveforms. Results were compared between professions using descriptive statistics, and logistic regression (expressed as odds ratios [ORs; 95% CI]) was performed to identify factors associated with high performance, which was defined by a threshold of 60% correct answers.

**Results:**A total of 1,832 professionals from 31 countries or regions completed the survey; 53% of respondents answered ≥ 60% of the questions correctly. The 3 questions with the most correct responses were related to waveforms that demonstrated condensation (90%), pressure overshoot (79%), and bronchospasm (75%). Conversely, the 3 questions with the fewest correct responses were waveforms that demonstrated early cycle leading to double trigger (43%), severe under assistance (flow starvation) (37%), and early/reverse trigger (31%). Factors significantly associated with ≥ 60% correct answers included years of ICU working experience (≥ 10 y, OR 1.6 [1.2-2.0], *P* < .001), profession (RT, OR 2.8 [2.1-3.7], *P* < .001), highest degree earned (graduate, OR 1.7 [1.3-2.2], *P* < .001), workplace (teaching hospital, OR 1.4 [1.1-1.7], *P* = .008), and prior ventilator waveforms training (OR 1.7 [1.3-2.2], *P* < .001).

**Conclusions:**Slightly over half respondents correctly identified ≥ 60% of waveforms demonstrating patient-ventilator discordance. High performance was associated with ≥ 10 years of ICU working experience, RT profession, graduate degree, working in a teaching hospital, and prior ventilator waveforms training. Some discordances were poorly recognized across all groups of surveyed professionals.

**Keywords:**ICUs; mechanical ventilation; patient-ventilator discordance; ventilator; waveform interpretation.

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**High frequency trauma: The new worl order?**

Intensive Care Med. 2024 Apr 24. doi: 10.1007/s00134-024-07446-z. Online ahead of print.

**Norepinephrine dose and concentration reporting: the devil is in the details**

*No abstract available*

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**Liraglutide effectiveness in preoperative weight-loss for patients with severe obesity undergoing bariatric-metabolic surgery**

**Abstract**

Preoperative management of patients living with severe obesity can be challenging; in this context, the preoperative weight loss may help to obtain better outcomes and less morbidity for bariatric surgery. Therefore, we evaluated the effectiveness of GLP-1 analogue Liraglutide in preoperative weight loss. We performed a single-center, quasi-experimental prospective study. Eligible participants were adults in preoperative management for bariatric-metabolic surgery with body-mass index ≥ 48 kg/m2. All patients were assigned liraglutide treatment, with an initial dose of 0.6 mg subcutaneous per day, the dose was increased each week until reaching 3.0 mg for 12 weeks. Weight loss and body composition were evaluated monthly using bioelectric impedance (BIA) (InBody 770 Scale®). We analyzed data using descriptive statistics, central tendency measures and dispersion for quantitative variables and absolute and relative frequencies for qualitative variables. A total of 37 individuals were included in this study, 28 (76%) were female and 9 (24%) were males, with an average age of 44 years. About the BMI, 19 patients (51%) had a BMI > 50 kg/m2, 10 (27%) > 40 kg/m2 and 8 (22%) > 60 kg/m2; with a total average BMI of 56.04 kg/m2. The initial weight was 147.4 ± 14.9 kg which decreased to 139.3 ± 16.8 kg; after 3 months of liraglutide administration. A total of 35 patients had some degree of weight loss (94.6%), while 2 (5.40%) had no weight changes. The total weight loss was 5.50% at 3 months of liraglutide treatment. Liraglutide could be an effective adjuvant therapy for preoperative weight loss in patients living with severe obesity.

**Keywords:**Liraglutide; Severe obesity; Weight-loss.