sia (P=0.64), mechanical ventilation (P=0.76) or catecholamine treatment (P=0.63) had no influence on the diurnal distribution of ARRHY. During 270/310 (90%) episodes there was an elevated C-reactive protein (CRP), in 176/310 (56.8%) an elevated leukocyte count [L] and in 230/310 (74%) episodes were there elevated fibrinogen levels (FGEN). These inflammation parameters on the day of ARRHY did not differ significantly when compared to the respective values 24 and 48 h before ARRHY onset (CRP 16.6±11, 16.3±11, 16±1mg/dl, P=0.9; L 11.4±5, 11.5±5, 11.9±5.7 G/l, P=0.7; FGEN 545±221, 565±208, 582±221mg/dl, P=0.26).

Conclusions: 1) Clinically significant, sustained ARRHY occurred in ~1/5 of patients in this medical-cardiologic ICU. 2) VT and AFIB were the single most frequent ARRHY. 3) ARRHY followed a circadian pattern irrespective of the presence of sedoanalgesia, mechanical ventilation or catecholamine support. 4) The vast majority of ARRHY occurred while there were signs of inflammation without preponderance to the ascending or descending limb of inflammation.

P211 Transthoracic cardioversion with damped biphasic waveform shocks

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Introduction: The biphasic waveform has been shown to have high efficacy for transthoracic ventricular defibrillation [1,2]. The objective of this prospective study was to evaluate the clinical efficacy of biphasic waveforms for cardioversion of atrial fibrillation.

Methods: The pulse is an asymmetric quasi-sinusoidal biphasic waveform. The peak current of the second phase was approximately half that of the first phase. Transthoracic cardioversion (29 emergent, 71 urgent and 41 elective) were performed in 141 patients who were receiving antiarrhythmic drugs (e.g., amiodarone). Ischemic heart disease was the most common (about 90%) etiology. Shocks were delivered through 11.5 cm paddles in the antero-apical position. The maximum delivered energy was 195 J.

Results: See Table.

Table

Delivered Energy	Cumulative Success	95% Confidence Interval
≤90 J	113/141 (80%)	72%–87%
≤140 J	121/141 (86%)	79%–92%
≤195 J	132/141 (94%)	88%–97%

Conclusions: Our clinical results demonstrate that the biphasic waveform with a delivered energy of ≤195 J was highly effective in cardioverting atrial fibrillation.

References:
1. Poole J *et al.*: *Resuscitation*, 1998, **37(2)**:S13,(P–11).
2. Vostrikov V *et al.*: *Resuscitation*, 1998, **3(2)**:S42,(O–16).

P212 Evaluation of transesophageal atrial pacing in the prone and lateral position

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Introduction: Transesophageal atrial pacing (TEAP) is used for temporary treatment of hypotension and/or low cardiac output caused by sinus bradycardia or atrioventricular junctional rhythm. It can also be used for temporary overdrive pacing of reentrant tachycardias. A pacing esophageal stethoscope (PES) is easy to place in supine intubated patients. However, no guidelines exist for PES placement in the prone or laterally positioned intubated patient.

Methods: After IRB approval and written informed consent, an 18 Fr PES with 1 cm depth markings (Model 550 CardioCommand, Inc) was inserted to a depth of insertion (DOI) of 44 cm from the edge of the maxillary alveolar ridge into the esophagus of 30 adult intubated patients in the supine position. With the pacing rate set 10–20 beats per min faster than the patient's intrinsic heart rate and the current output on the pulse generator (Model 2A) set at its lowest current setting (5.5 mA), the current was gradually increased until atrial capture was achieved. The minimum current producing continuous atrial capture throughout the respiratory cycle was recorded as the pacing threshold. The PES was then withdrawn 1 cm at a time and pacing thresholds were redetermined for each DOI from 44 to 25 cm inclusive. After data collection in the supine position, each patient was then positioned into either the prone (P), right (RLD) or left lateral decubitus (LLD) position. Data were collected in the same manner after the patients' position was changed. The width of the "Region of Capture" (ROC) represents