

## STANDARD VERSUS ABDOMINAL LIFTING AND COMPRESSION CARDIOPULMONARY RESUSCITATION

### Vivian Liu

Henan University of Chinese Medicine, China

**Background:** This study compared outcomes of abdominal lifting and compression cardiopulmonary resuscitation (ALP-CPR) with standard CPR (STD-CPR).

**Materials and Methods:** Patients with cardiac arrest seen from April to December 2014 were randomized to receive standard CPR or ALP-CPR performed with a novel abdominal lifting/compression device. The primary outcome was return of spontaneous circulation (ROSC).

**Results.** Patients were randomized to receive ALP-CPR ( $n = 40$ ) and STD-CPR ( $n = 43$ ), and the groups had similar baseline characteristics. After CPR, 9 (22.5%) and 7 (16.3%) patients in the ALP-CPR and STD-CPR groups, respectively, obtained ROSC. At 60 minutes after ROSC, 7 (77.8%) and 2 (28.6%) patients, respectively, in the ALP-CPR and STD-CPR groups survived ( $p = 0.049$ ). Patients in the ALP-CPR group had a significantly higher heart rate and lower mean arterial pressure (MAP) than those in the STD-CPR group (heart rate: 106.8 versus 79.0,  $p < 0.001$ ; MAP: 60.0 versus 67.3mmHg,  $p = 0.003$ ). The post treatment PCO<sub>2</sub> was significantly lower in ALPCPR group than in STD-CPR group (52.33 versus 58.81,  $p = 0.009$ ). PO<sub>2</sub> was significantly increased after ALP-CPR (45.15 to 60.68,  $p < 0.001$ ), but it was not changed after STDCPR. PO<sub>2</sub> after CPR was significantly higher in the ALP-CPR group (60.68 versus 44.47,  $p < 0.001$ ). There were no differences between genders and for patients who are  $> 65$  or  $\leq 65$  years of age.

**Conclusions:** The abdominal lifting and compression cardiopulmonary resuscitation device used in this study is associated with a higher survival rate after ROSC than standard CPR.

## BIOGRAPHY

Vivian Liu has completed her PhD from Southern Medical University (China), major in Biochemistry & Molecular Biology. Now she is the director of Research Administration & International Collaboration of People's Hospital Affiliated to Henan University of Chinese Medicine. She has published 3 papers on oral cancer in English and Chinese. As one of the new members in team, she is trying to make abdominal lifting and compression CPR well known around the world.

[13239831@qq.com](mailto:13239831@qq.com)



Note: