



## Letter to the Editor

### Passive leg raising in CPR: Increasing the effectiveness of each compression



Sir,

Latest guidelines on resuscitation of cardiac arrest in adults have highlighted again the importance of beginning cardiopulmonary resuscitation (CPR) as earlier as possible with high-quality chest compressions (depth of 5–6 cm, rate of 100–120 compressions per minute with complete chest recoil, and minimizing interruptions) in order to optimize the cardiac output as much as possible, and thus ensuring both better perfusion of essential organs (heart and brain) and outcomes.<sup>1</sup>

The effectiveness of each compression should be determined by the volume of venous blood returned to the heart. An increased volume should correspond to a higher stroke volume. The manoeuvre of passive leg raising in adults has been estimated to increase approximately 300 ml of blood volume to the heart.<sup>2</sup> This extra amount of blood can improve the results obtained with CPR by (i) increasing the stroke volume with each compression, and (ii) redistributing more efficiently the blood volume, mainly to vital organs (heart and brain) and not to lower extremities.<sup>3</sup>

This manoeuvre should be performed in presence of two or more assistants or on a chair, if close; which does not interfere with the performance of the high quality CPR (compressions, ventilations and defibrillations). Therefore, in our opinion, we believe it should be important to recommend performing this new manoeuvre in CPR until further scientific evidence will support or reject it.

### Conflict of interest statement

No conflicts of interest to declare.

### References

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