



## WATER RESCUE WITH AIDS

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### PURPOSE

The lifeguard work requires physical competency skills to dominate the aquatic environment and to perform high-quality cardiopulmonary resuscitation (CPR). Our goal was to assess the impact of equipment aids on the lifesaving + CPR performance.

### RESULTS

In the intragroup analysis for water rescue time (WRT), we found that it was faster ( $301 \pm 51.2$  s) with the rescue board (RB) ( $p < 0.001$ ). Lifeguards who used this aid were 98 s, 86 s and 84 s faster than using no material (Nm), fins (F) and fins and rescue tube (FRT) respectively. Only the CPR performed at baseline (B) and RB post rescue reached the quality standard (QS) equal to or greater than 70% (B,  $82 \pm 18.7$ ; Nm,  $69 \pm 29.5$ ; F,  $56 \pm 35.2$ ; FRT,  $52 \pm 29.9$ ; RB,  $79 \pm 20.8$ ). Quality of ventilations (QB) was deficient in all cases (B,  $46 \pm 22.5$ ; Nm,  $36 \pm 36.4$ ; F,  $46 \pm 26.2$ ; FRT,  $36 \pm 26.2$ ; RB,  $46 \pm 33.0$ ).

### MATERIAL Y METHODS

35 lifeguards accepted the invitation to participate. A quasi-experimental design was used. The lifeguards performed a baseline CPR test, a water rescue (150 meters) in 4 different equipment aids situations (fins, fins and rescue tube, rescue board and no material), and a post-rescue CPR test.



### CONCLUSIONS

Water rescue equipment aids (especially RB) improve rescue performance. Only baseline and RB chest compressions quality is acceptable (over 70%). Quality of ventilations has been poor and innovative strategies should be tested to improve this point.