

Adjusting the algorithm of traumatic cardiac arrest for emergency medical services

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INTRODUCTION

Traumatic cardiac arrest (TCA) mortality was 96.2% and a favorable neurological outcome was observed in 43.5% of survivors.

The TCA guidelines recommend considering withholding resuscitation if, after the elimination of reversible causes, there is no return of spontaneous circulation (ROSC) or no evidence of heart contractions detected on ultrasound in pulseless electrical activity (PEA).

It is recommended to withhold treatment in patients with massive trauma incompatible with survival and in trauma patients presenting with apnoea, pulselessness and without organised ECG activity.

It was found that with certain criteria such as initial asystole rhythm, unwitnessed cardiac arrest, EMS response time until resuscitation of more than 20 minutes and no out-of-hospital ROSC, more than 99% mortality can be predicted.

AIM

To adjust the algorithm of traumatic cardiac arrest (TCA) for emergency medical services (EMS).

CONCLUSIONS

It would be reasonable to adjust the TCA algorithm for the needs of EMS.

RESULTS

INITIAL TRAUMA ASSESSMENT

Scene assessment and initial patient assessment

CONSIDER WITHHOLDING RESUSCITATION

Massive trauma incompatible with survival

Apnoea

Asystole

Non-reactive pupils

Loss of vital signs > 15 min

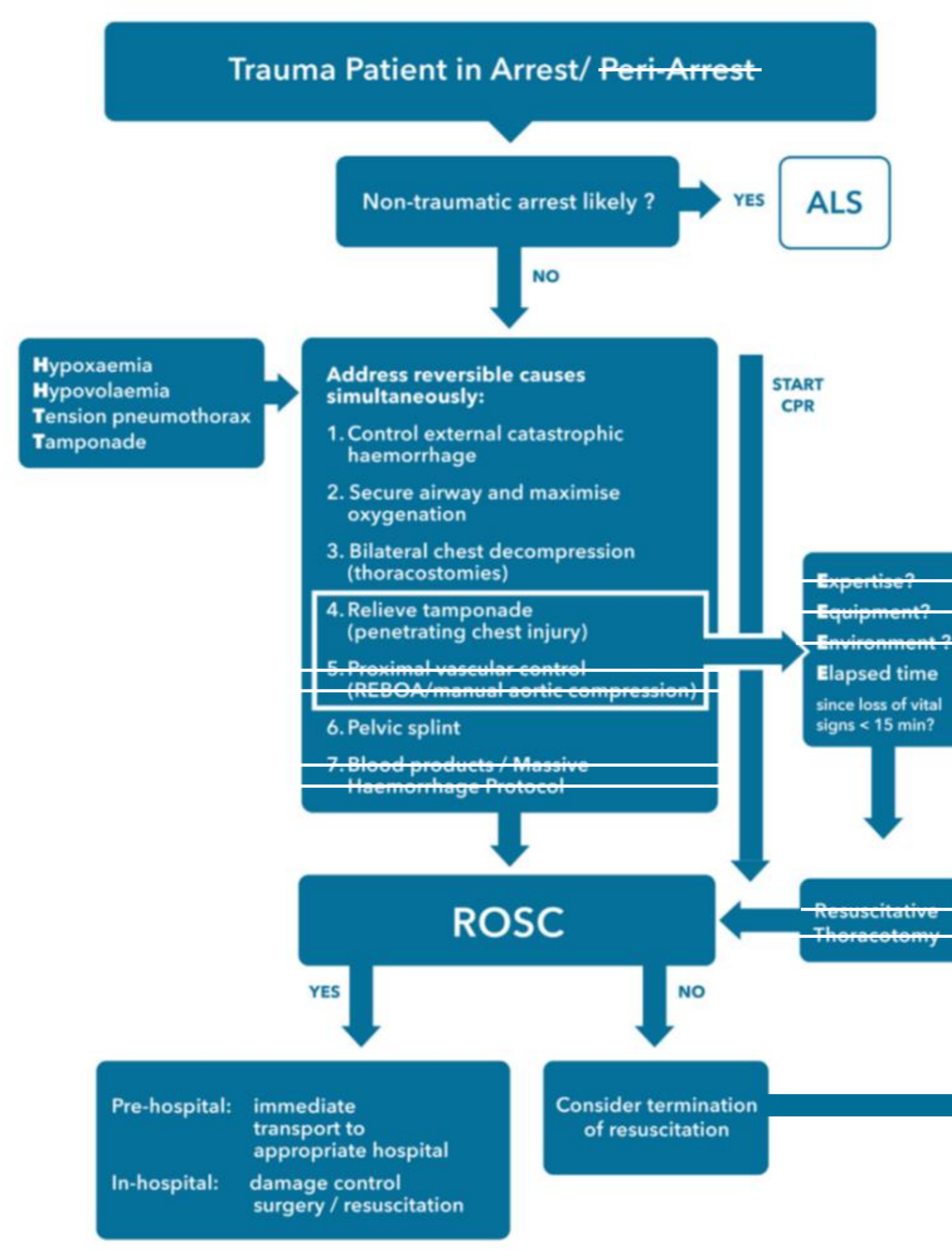
Unwitnessed cardiac arrest

NO

YES

WITHHOLDING RESUSCITATION

TRAUMATIC CARDIAC ARREST/ PERI-ARREST ALGORITHM



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