GRADE CoSTR Example

CONSENSUS ON SCIENCE:

Impedance Threshold Device + Standard CPR (I) vs Standard CPR (C)

For the critical outcome of “neurologically intact survival” we have identified high quality evidence from one RCT enrolling 8718 OHCA showing no benefit (OR 0.97 95% CI 0.81 – 1.16). For the important outcome of “survival to hospital discharge” high quality evidence from the same RCT shows no benefit (OR 1.00 95% CI 0.86 – 1.16)

Impedance Threshold Device + Active Compression Decompression CPR (I) vs Active Compression Decompression CPR (C)

For the important outcome of “survival to hospital discharge” we have identified moderate quality evidence (downgraded for indirectness) from two RCT enrolling 421 patients showing no benefit (OR 0.81 95% CI 0.33 – 2.01). We did not identify any evidence to address the critical outcome of “neurologically intact survival”.

Impedance Threshold Device + Active Compression Decompression CPR (I) vs Standard CPR (C)

For the critical outcome of “neurologically intact survival” we have identified low quality evidence (downgraded for very serious concerns over risk of bias) from three RCTs enrolling over 2470 patients showing benefit (OR 1.60 95% CI 1.09 – 2.33). For the important outcome of “survival to hospital discharge” low quality evidence from the same RCTs shows potential benefit (OR 1.32 95% CI 0.99 – 1.16)

TREATMENT RECOMMENDATION (including direction, quality of evidence and strength of evidence grade):

Impedance Threshold Device + Standard CPR (I) vs Standard CPR (C)

We recommend against ITD in combination with standard CPR in comparison to standard CPR alone for OHCA (strong recommendation, high quality of evidence). Values and preferences statement: In making this recommendation we place a higher value on not allocating resources to an ineffective intervention over any yet to be proven benefit for critical or important outcomes.

Impedance Threshold Device + Active Compression Decompression CPR (I) vs Active Compression Decompression CPR (C)

We suggest against ITD in combination with active compression decompression CPR in comparison to active decompression CPR alone for OHCA (weak recommendation, moderate quality of evidence). Values and preferences statement: In making this recommendation we place a higher value on not allocating resource to an unproven intervention over any yet to be proven benefit for critical or important outcomes.

Impedance Threshold Device + Active Compression Decompression CPR (I) vs Standard CPR (C)

We suggest against ITD in combination with active compression decompression CPR in comparison to standard CPR alone for OHCA (weak recommendation, low quality of evidence). Values and preferences
statement: In making this recommendation we place a higher value on not allocating resources to an unproven intervention over any yet to be proven benefit for critical or important outcomes.

NOTES:

* **Strength of Recommendation**

**Strong:** the desirable effects of an intervention clearly outweigh the undesirable effects, or clearly do not.

For patients—most people in your situation would want the recommended course of action and only a small proportion would not; request discussion if the intervention is not offered

For clinicians—most patients should receive the recommended course of action

**Weak:** the trade-offs are less certain—either because of low quality evidence or because evidence suggests that desirable and undesirable effects are closely balanced.

For patients—most people in your situation would want the recommended course of action, but many would not

For clinicians—you should recognize that different choices will be appropriate for different patients and that you must help each patient to arrive at a management decision consistent with her or his values and preferences

**Strength of Evidence Grade Definition**

**High:** We are very confident that the true effect lies close to that of the estimate of the effect

**Moderate:** We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different.

**Low:** Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect.

**Very low:** We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect.