Topical lidocaine to suppress trigemino-cardiac reflex

Editor—We appreciate Chigurupati and colleagues1 for the manuscript related to the topical administration of lidocaine during intra-operative repetitive occurrence of the trigemino-cardiac reflex (TCR) during microvascular decompression (MVD). As the senior author of this letter was the first to introduce the TCR in skull base surgery and in MVD, we would like to give our views related to this case.1 –3

As discussed in the case, the effectiveness of atropine use alone is questionable because it does not completely prevent bradycardia or hypotension as described in the related physiological contexts.1 4 However, the combination of both atropine and topical instillation of local anaesthetic lidocaine has been shown to suppress the TCR completely in a few cases.4 Till now, the pathophysiological mechanism and the risk factors related to TCR are not fully elucidated; therefore, it does not seem plausible to make recommendation for the use of combination therapy (atropine and local anaesthetic).2 4 In addition, during these types of procedures, the traction over nerve or related zone is found to be the commonest and the most potent stimulus for inciting TCR;1 therefore, avoidance or minimization of traction is usually recommended as first line of therapy.3 –5 Moreover, block of nerve stimuli by local anaesthetics do not always prevent or abort the TCR episodes.5

In summary, the knowledge of pathophysiological mechanisms and risk factors related to TCR needs further extensive research and future recommendations for specific management of TCR would be guided by these results.

Declaration of interest

None declared.

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