PRESENTATION 2

Temporomandibular Joint Dysfunction following use of a Supraglottic Airway Device in General Anaesthesia

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Background

Supraglottic airway devices (SADs) are used for securing the airway in over 50% of general anaesthetics in the UK. Although considered relatively safe devices, there are several potential complications. These include temporomandibular joint (TMJ) dysfunction, which has been reported in isolated cases but not well-characterised in clinical studies to date. This study investigated TMJ dysfunction following the use of a SAD during general anaesthesia.

Methods

Fifty adult surgical patients scheduled to receive a SAD were recruited. Pre-operatively, patients were asked to complete a 12-item questionnaire (to assess subjective TMJ function at baseline) and objective measurements of the jaw (inter-incisor distance, forward and lateral jaw movements) were taken. The questionnaire and objective measurements were then repeated two-to-24 hours after the operation.

Results

There were no statistically significant differences in mean inter-incisor distance, forward jaw protrusion and right lateral jaw movement post-operatively versus pre-operatively (p=0.588, p=0.135 and p=0.372 respectively). Mean left lateral jaw movement was significantly reduced post-operatively (p=0.029). Subjectively, 90% of patients reported no changes post-operatively in any of the parameters questioned. New post-operative symptoms included jaw joint pain (4% of recruits), jaw muscle pain (4%), jaw grinding (2%), jaw locking (1%), and difficulty chewing (1%).

Key messages

There was a low incidence of subjective TMJ discomfort following SAD use. Most objective measures showed no significant change post-operatively. If shown to be consistent in future studies, these results can help reassurance patients during the anaesthetic consenting pre-operatively, particularly for those worried about having an airway device inserted.

