

Airway assessments for conscious sedation – is it time for an update?

Presenter: Ilyaa Rehman

Co-authors: Alison Wright, Cameron Weir, Abigail Heffernan, Stephanie Sammut

Dundee Dental Hospital & School

Objectives:

Certain patients carry an increased risk of respiratory depression during conscious sedation. Without a comprehensive airway assessment, staff may not always identify patients at higher risk. Dundee Dental Hospital (DDH) offers both dentist-led and anaesthetist-led sedation, to cater for higher-risk patients.

There is no gold standard for airway assessment. The aim of this project was to implement a validated airway assessment tool, STOPBang, then modify it to align relevance to conscious sedation for dentistry.

Methods:

A departmental staff survey sought opinions on airway assessment.

Sedation pre-assessment forms were assessed before and after implementation of the STOPBang assessment tool, which was subsequently modified by a multidisciplinary team and re-introduced as the 'SNOB' airway assessment.

Outcomes:

In round one, before STOPBang introduction, 46.9% (n = 30) of records failed to demonstrate evidence of airway assessment, and only 4.7% (n = 3) of records detailed which airway assessment tool was employed. Thirty per cent (n= 30) of clinical staff felt uncomfortable conducting airway assessments.

Following staff training on STOPBang, round two data demonstrated 100% (n= 25) compliance.

STOPBang was subsequently modified to allow rapid assessment, focusing on four key relevant parameters ('SNOB'): snoring status, neck size, observed breathing anomalies, and BMI. A binary scoring system stratifies patients into low risk (score ≤ 1) or higher risk (score ≥ 2). The former group are deemed suitable for dental-led sedation, while the latter receive anaesthetist-led sedation.

Conclusion:

The unique sedation service at DDH allows a wider range of patients to receive their treatment, who may otherwise be referred to a tertiary facility. While STOPBang is validated for assessing obstructive sleep apnoea, our survey highlighted the practical issues of performing formal and time-consuming assessments. We propose that our novel 'SNOB' airway assessment tool provides a simplified but targeted approach to help identify patients with increased airway risk.