

Airway Assessment on the Labour Ward

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Introduction

The incidence of difficult intubation in the obstetric population is 1 in 250.[1] With the infrequent use of general anaesthesia, the anaesthetist must be prepared for potential difficulty.[2] This includes performing a detailed airway assessment prior to administering labour analgesia or anaesthesia. Previous departmental data found that 70% of patients undergo a comprehensive airway assessment. Recently the anaesthetic chart was modified to specifically indicate the presence or absence of a potentially difficult airway. We aimed to re-audit how comprehensive the initial airway assessment was, and whether potentially difficult airways were being highlighted.

Methods

We reviewed the anaesthetic charts over a 2 week period in October 2020. The primary anaesthetic intervention, booking BMI, and adequacy of airway assessment were rated. The six variables used were mouth opening, thyromental distance, Mallampati score, jaw protrusion, neck extension and dentition. These were rated as 'nothing' (0/6), 'scant' (1-2/6), 'moderate' (3-4/6), or 'comprehensive' (5-6/6). We also recorded whether the patient's airway was assessed as being potentially difficult or not. Ethical approval was gained from the departmental QI team.

Results

We reviewed 100 anaesthetic charts. The mean BMI was 26.6kg/m (range 18.1 - 62). Only 5 % had a general anaesthetic , 50 % receiving spinal anaesthesia, 43% epidural and 2% CSE. Only 62% had a comprehensive airway assessment, while 26% was considered moderate, 5% being scant, and 7% having no documented airway assessment (figure 1). On only 50% of occasions was the airway assessment documented as highlighting potential difficulty or not. The most commonly assessed airway parameters were the Mallampati score (90%), followed by dentition (87%), mouth opening (83%) and neck extension (79%). While the least assessed parameters were thyromental distance (56%) and jaw protrusion (58%).

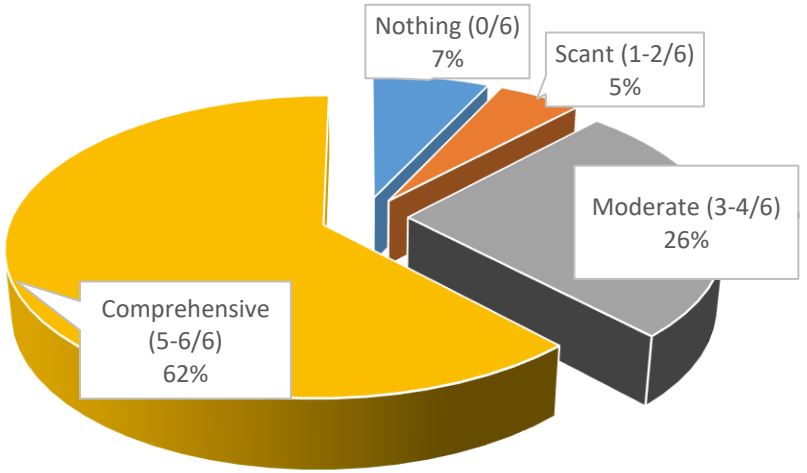


Figure 1: Adequacy of Airway Assessment

Discussion

Most patients had a comprehensive airway assessment, however only half had an overall assessment documented. Interventions include highlighting the importance of airway assessment in the departmental safety brief, incorporate a 'difficult airway?' section on the handover sheet, and prompts on the epidural trollies.

References

1. McDonnell NJ et al, the ANZCA Trails Group. Difficult and failed intubation in obstetric anaesthesia: an observational study of airway management and complications associated with general anaesthesia for caesarean section. Int J Obstet Aneth 2008;17:292-297.

2.. Searle RD, Lyons G. Vanishing experience in training for obstetric general anaesthesia: an observational study. Int J Obstet Anesth 2008;17:233-7