



ORIGINAL RESEARCH PAPER

Anaesthesiology

INCIDENCE OF INTRA OPERATIVE AWARENESS IN SURGICAL PATIENTS DONE UNDER GENERAL ANAESTHESIA BY EVALUATING MODIFIED BRICE QUESTIONNAIRE IN THE POST OPEARATIVE PERIOD IN SAVEETHA MEDICAL COLLEGE AND HOSPITAL, TAMILNADU.

KEY WORDS: Awareness, Surgical population, Modified Brice questionnaire.

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ABSTRACT

BACKGROUND: The incidence of intra operative awareness with explicit recall in the western world has been reported to be between 0.1% and 0.2% in the general surgical population and upto 1-2% of patients at high risk for this complication. Our objective is to find the incidence of intra operative awareness among the patients undergone surgery with general anaesthesia in Saveetha Medical College and hospital, Tamilnadu. **METHODOLOGY:** After research ethics board approval, post operative patients undergone surgery with general anaesthesia were asked to fill the Modified Brice questionnaire. Prospective observational study with sample size of 64 patients was studied in one month. **RESULT:** In the 64 patients studied, no patient had intra operative awareness. **CONCLUSION:** Awareness under general anaesthesia is a distressing complication with a potential for long-term psychological consequences, and every effort should be undertaken to prevent it. It is reassuring though our data that the incidence of intra operative awareness of surgical patients done under general anaesthesia is uncommon.

INTRODUCTION

Awareness is the post operative recall of sensory perception during general anaesthesia. Despite good anaesthetic management awareness during general anaesthesia may occur which is usually not associated with pain, in few cases however the patient may experience excruciating pain and have long term neuropsychiatric sequelae like post-traumatic stress disorder.[1]

The incidence of awareness has been reported to be between 0.1% and 0.2% in the general surgical population in the Western world.[2][3] Patients undergoing cesarean section, cardiothoracic surgery or emergency surgery, patients with a difficult airway and those developing intra-operative hypotension are among those considered to have increased chances of awareness and the incidence in this group may be as high as 1-2%. The incidence of awareness may vary among patient population due to differences in genetic make-up and anesthesia technique.[4]

So, we conducted a prospective observational study to find the incidence of intra-operative awareness in patients undergone for surgery with general anaesthesia.

METHODOLOGY

After research ethics board approval, this study was conducted in Saveetha Medical College and Hospital, Thandalam, Kancheepuraam, Tamilnadu , on post operative patients who have undergone surgery with general anaesthesia.

The study type is prospective observational study with sample size of 64 patients and sampling method used was simple random sampling in one month.

The study tool used for this study is – Modified Brice questionnaire , which has the following questions

1. What is the last thing you remember before surgery?
2. What is the very first thing you remember after waking up?
3. Can you remember anything in between these two periods?

If the awareness is detected then,
What did you notice :Sound, touch, paralysis, or pain?

Have there been any consequences for you?
The response of patients are recorded and assessed.

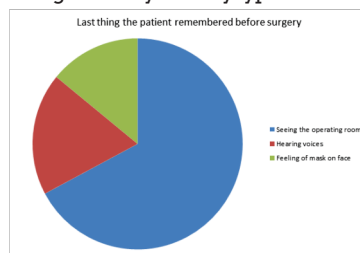
RESULT

In the study of the 64 patients, 11 patients were below 18 years of age, 23 patients between 18 to 40 years of age, 17 patients between 40 to 60 age group and 13 patients above 60 years of age. And in these 64 patients 38 were males and 26 were females.

The last thing the patient remembered before surgery was seeing the operating room (in 43 patients), hearing voices (in 12 patients) and feeling of mask on face(in the remaining 9 patients).

The first thing the patient remembered after waking up was Hearing voices, Feeling of mask on face, seeing the operating room, being with family, feeling pain, being in the recovery room and being in ICU.

No patient among the study had any type of awareness.



First thing the patient remembered after waking up	Number of patients
Hearing voices	5
Feeling of mask on face	2
Seeing the operating room	23
Being with family	12
Feeling pain	3
Being in the recovery room	11
Being in the ICU	8

CONCLUSION

Awareness is caused by the administration of general anesthesia that is inadequate to maintain unconsciousness. This could be due to various factors, patient and surgical

factors which necessitate a deliberate reduction in depth of anesthesia. Another contributory mechanism could be pharmacogenetic factors resulting in variability in anesthetic dose requirement among patients. Patients undergoing major surgery for cancer would be expected to have an increased incidence of awareness because of multiple predisposing factors such as extensive surgery with major blood loss, one-lung ventilation in thoracic surgery and unanticipated difficult airway in head and neck cancer.[4].

However, in this study we could not to demonstrate awareness under general anesthesia.

One of the difficulties in identifying the true incidence of awareness is that it is a patient reported outcome and therefore, the detection of awareness can be subjective.

We conclude by saying that the incidence of intra operative awareness of surgical patients done under general anaesthesia is uncommon.

REFERENCES

- [1] K Sandhu and HH Dash. Awareness during anaesthesia. *Indian J Anaesth* 2009;53(2):148-157.
- [2] Sebel PS, Bowdle TA, Ghoneim MM, Rampil IJ, Padilla RE, Gan TJ, *et al.* The incidence of awareness during anesthesia: A multicenter United States study. *Anesth Analg* 2004;99:833-9.
- [3] Myles PS, Leslie K, McNeil J, Forbes A, Chan MT. Bispectral index monitoring to prevent awareness during anaesthesia: The B-Aware randomised controlled trial. *Lancet* 2004;363:1757-63.
- [4] Errando CL, Sigl JC, Robles M, Calabuig E, García J, Arocas F, *et al.* Awareness with recall during general anaesthesia: A prospective observational evaluation of 4001 patients. *Br J Anaesth* 2008;101:178-85.