

Evaluating the Reasons for Cancellation of Elective Otorhinolaryngology-Head and Neck Surgeries and Coping Strategies

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Problem Description

The cancellation of elective surgeries is a challenge in the field of otolaryngology head and neck surgery. Not only do they signal potential quality of care issues, but they also represent a significant waste of healthcare resources. There is a lack of in-depth and extensive research and discussion on the various reasons that lead to cancellations in otolaryngology head and neck surgery.

Objective

- To comprehensively identify and analyze the factors that lead to the cancellation of elective head and neck surgery;
- To develop targeted prevention strategies to reduce the impact of cancelled surgery.

Methods

Study Site

A retrospective analysis of patients aged 18 years and older discharged from the Department of Otolaryngology, Head and Neck Surgery, West China Hospital (WCH), Sichuan University, China between 2 August 2019 and 28 December 2021. It is a top hospital in China with more than 4300 beds, of which 104 inpatient beds are in the Department of Otolaryngology, Head and Neck Surgery.

Selection Criteria

To analyze the effect of cancelled surgery on 30-day planned readmissions, we selected all surgical patients with 30-day planned readmissions.

Statistics Analysis

For categorical variables in univariate analysis, the chi-square test was utilized. The statistical analyses were carried out using IBM SPSS Statistics 20, p<0.05 is statistical significance.

Ethical Considerations

This study was approved by the Bioethics Committee of West China Hospital, Sichuan University (No: 2022-174). All data were anonymized.

Results

Study Population and Surgery

The study included 7,608 adults (aged ≥ 18 years) who underwent otolaryngology-head and neck surgery between 2 August 2019 and 28 December 2021. Of these, 48.9% (3,721) underwent stage IV surgery, 47.6% (3,622) underwent stage III surgery, and 3.5% (265) underwent stage II surgery. According to the National Health Commission of China, stage IV procedures are the most complex under the Graded Management of Surgery Guidelines.

Planned Readmissions

A total of 64 patients were readmitted within 30 days, 33 males (51.6%) and 31 females (48.4%), with a mean age of 50.23 ± 15.79 years. The main reason for readmission was cancellation of surgery, accounting for 81.2% (52 of 64 cases). Cancellations were due to medical factors (53.1%, 34 of 64), patient-related considerations (25.0%, 16 of 64) and administrative issues (3.1%, 2 of 64) (Table 1).

Table 1. Causes of surgery cancellation in otolaryngology-head and neck surgery

Cause	N (%)
- Medical factors	34 (53.1)
Hypertension	7 (10.9)
Infection or fever	7 (10.9)
Incomplete preparation before operation	5 (7.8)
Changes in diagnostic or surgical indications	4 (6.3)
Aspirin	4 (6.3)
Clopidogrel	2 (3.1)
Abnormal labs	2 (3.1)
HIV+	2 (3.1)
- Patient reasons	16 (25.0)
Menstruation	11 (17.2)
Patient rejection	5 (7.8)
- Administrative problems	2 (3.1)
Incorrect patient name	1 (1.6)
Lack of blood type A	1 (1.6)

Conclusion

In response to the causes of cancellations, we propose that one strategy for managing surgical cancellations is to establish outpatient preoperative clinics with multidisciplinary teams consisting of anaesthetists, pharmacists, dentists or dental hygienists and nurses. Involving the multidisciplinary team in the pre-admission assessment of patients would be an effective approach to reducing the number of elective surgery cancellations.