



“THE STUDY TO ASSESS AN INCIDENCE OF FEVER IN POST-OPERATIVE PATIENTS ADMITTED IN SURGICAL ICU AT NATIONAL CANCER INSTITUTE, DHARAMPETH, NAGPUR.”

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ABSTRACT

INTRODUCTION: Postoperative fever is one of the most common problems seen in the postoperative ward. Most cases of fever immediately following surgery are self-limiting. The appearance of postoperative fever is not limited to specific types of surgery. Fever can occur immediately after surgery and seen to be related directly to the operation or may occur sometime after the surgery as a result of an infection at the surgical site or infections that involve organs distant from the surgery. **Objectives:** To study the common causes of post operative fever in general surgery patients. To study the correlation between the cause and the day of onset of fever. To study the risk factors associated with post operative fever. **Material and Method:** In this study Descriptive Research Design was used. The samples were 30 Post operative patients which fulfils inclusion criteria. Setting of the study was surgical ICU, National cancer Institute, Dharampeth, Nagpur. **RESULTS:-**The result of this study shows that There 6 patients in the age group of 41yrs to 60 yrs having increase WBC count. Fisher exact test statistic value is 0.0449. The result is significant at $p < .05$. so the post operative fever is significantly associated with gender of the patient, Types of surgery and increase WBC count in Patient.

KEYWORDS : Assess, fever, post-operative patients, surgical ICU.

1. INTRODUCTION

The emergence of fever, defined as a temperature greater than 38°C (100.4°F), during the preoperative time course can present a diagnostic and management challenge for the emergency medical care provider. Infectious and non-infectious causes of the fever must be distinguished. Infectious causes should be considered mainly for fever presenting later than 48 hours after surgery, whereas early postoperative fever is most commonly attributed to non-infectious causes. Others have stated that non-infectious causes appear to cause lower-temperature fevers¹.

The causes of post procedural fever range from inflammation or drug reaction to life threatening necrotizing soft-tissue infection (NSTI). As with all medical diagnoses, a thorough history and physical examination should serve as the diagnostic starting point in ascertaining relevant information in terms of exposure to infectious pathogens. In addition, the timing of fever after a procedure can help differentiate potential causes. It is therefore useful to divide the time frame of post procedure fever into 4 categories: immediate, acute, sub-acute, and delayed. Fevers that occur in the first 4 days after surgery are less likely to represent infectious complications than are fevers occurring on the fifth and subsequent days. Fever can also accompany the continuum of systemic inflammatory response, sepsis, severe sepsis, and septic shock. The time of emergence of post procedure fever can guide the provider's differential diagnosis and, thus, management decisions. In a prospective study of 81 patients with idiopathic postoperative fever, Garibaldi and colleagues found that 80% of those with fever on the first postoperative day had no infection. Within the group in whom fever developed by the fifth postoperative day, 90% had an identifiable source such as wound infection (42%), urinary tract infection (UTI) (29%), or pneumonia (12%).^{2, 5} Dellinger^{6,7} showed that early fevers (ie, emerging between days 1 and 4) rarely represent an infection. However, a fever that begins on or after post procedure day 5 is much more likely to represent a clinically significant infection, so appropriate diagnostics to look for an infectious source may be useful¹

2. Problem Statement

The study to assess an incidence of fever in post-operative patients admitted in surgical ICU at National Cancer Institute, Dharampeth, Nagpur.

3. OBJECTIVES

- To study the common causes of post operative fever in general surgery patients.

- To study the correlation between the cause and the day of onset of fever.
- To study the risk factors associated with post operative fever.

4. Hypothesis

- H1-** There is significant difference in some incidence of fever in post operative patients admitted in surgical ICU
- H0-** There is no significant difference in incidence of fever in post operative patients admitted in surgical ICU

5. METHODOLOGY

In this study Descriptive Research Design was used. The samples were 30 adolescent girls. Setting of the study was surgical ICU, National cancer Institute, Dharampeth, Nagpur and sampling technique was non probability purposive sampling technique. Inclusion criterions Post operative patients present at the time of data collection. Exclusion criteria, there is no any exclusion criteria. Structured questionnaire were used to assess incidence of fever in post-operative patients in surgical ICU. For this study we have used survey method by interview technique.

6. RESULT

The present study has been taken up to assess an incidence of fever in post-operative patients admitted in surgical ICU. Analysis and interpretation is based on the objectives of the study. A structured questionnaire used for data collection.

FEVER/AGE GROUP	1-40 YEARS	40 YRS AND ABOVE
YES	5	5
NO	3	17

FEVER/AGE GROUP	1-40 years	40 yrs and above	Marginal Row Totals
YES	5(2.67)[2.04]	5 (7.33)[0.74]	10
NO	3(5.33)[1.02]	17 (14.67)[0.37]	20
Marginal ColumnTotals	8	22	30GrandTotal

The chi-square statistic with Yates correction is 2.5781. The p-value is .10835. Not significant at $p < .05$.

CONCLUSION:

Fever of patients is not significantly associated with age of patients.

FEVER/GENDER	MALE	FEMALE
YES	5	5
NO	11	9

fever/gender	Male	Female	Marginal Row Totals
YES	5 (5.33)[0.02]	5 (4.67)[0.02]	10
NO	11 (10.67)[0.01]	9 (9.33)[0.01]	20
Marginal Column Totals	16	14	30 (GrandTotal)

The chi-square statistic with Yates correction is 0.0167. The p-value is 0.89705 Not significant at $p < .05$.

CONCLUSION:

Fever in post-operative patients admitted in surgical ICU is not significantly associated with gender of patients.

FEVER/TYPE OF SURGERY	MAJOR	MINOR
YES	10	0
NO	17	3

Results			
Fever/type of surgery	Major	Minor	Marginal row totals
YES	10	0	10
NO	17	3	20
Marginal Column Totals	27	3	30 (Grand Total)

The Fisher exact test statistic value is 0.532. The result is not significant at $p < .05$.

CONCLUSION:

Fever in post-operative patients admitted in surgical ICU is not significantly associated with type of surgery.

Fever/wbc count	Within range	Out/in range
YES	4	6
NO	16	4

RESULTS

Fever/type of surgery	Major	Minor	Marginal row totals
YES	4	6	10
NO	16	4	20
Marginal Column Totals	20	10	30 (Grand Total)

The Fisher exact test statistic value is 0.0449. The result is significant at $p < .05$.

CONCLUSION:

Fever in post-operative patients admitted in surgical ICU are significantly associated with WBC count of patients

8. Recommendations

Recommendations for further study based on the findings of the study the following recommendations could be made-

1. A similar study may be conducted on a larger population for generalization of findings.
2. To assess the effectiveness of planned teaching program on knowledge regarding post operative fever among nurses.
3. A study to assess the knowledge regarding post operative fever among doctors.
4. To assess knowledge and attitude regarding post operative fever among relatives.
5. A study may be conducted to assess the existing knowledge of staff nurses regarding post operative fever.
6. A planned teaching may be used in the hospitals, so that the entire nurses can participate in improving the knowledge regarding post operative fever.

9. REFERENCES

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