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A Study on Pain Assessment and Management in Post Operative Patients

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Abstract

Introduction: Pain is subjective in nature. It can express different manners by the patient (or) Individuals. The role of diagnostic pain procedures is considered very important. It can be classified into acute pain (i.e ; short lived pain)and chronic pain (i.e; pain that lasts for months). It shows effect on socio economic status of the patients. Poor pain management is likely to persist until pain management practices became consistent with guidelines developed from the best available scientific evidence. In case of rational pain management needs pain assessment. So pain assessment plays a major role in rationalize pain management. **Method:** This study was prospective observational multi center study. **Results:** The study was conducted from July 2021 to Dec 2021 in various hospitals in and around Guntur district. A total of 563 patients were participated in the current study out of 290 were males and remaining were females. At the 4-h VAS evaluated that, the moderate pain was found to be 39.25 % of total population and Severe pain as 19.89%. The study results were monitored and continued for 24 hours. Only 5.5% of patients were consumed strong opioids during the first 24 h as postoperative analgesics.

Conclusion: Pain assessment plays a major role in the management of chronic and acute pain. If assessment was done we can improve the pharmaceutical care and improved socio-economic status of the patients

Keywords: subjective, pain, scientific evidence, rational, pain assessment.

INTRODUCTION

Pain is an unpleasant sensory and emotional experience that is associated with actual/potential tissue damage on described in terms of such damage. It is a subjective, individual experience that has physical, psychological and social determinants. There is no objective measurements of pain.[1,2]

Pain can be classified in to two types like Acute and Chronic. Pain assessment scales plays a major role in the management of post operative patients.

The different type's scales are as follows[3]

a) Facial scale
b) Numerical rating scale
c) FLACC scale
d) CRISE scale
e) COMFORT scale
f) Mc Gill Pain scale

g) Color Anlog scale
h) Mankoski pain scale
i) Brief pain Inventory
j) Visual Analog scale

The pain history should include the following[4-5]:

- Significant previous and/or ongoing instances of pain and its effect on the patient
- Previously used methods for pain control that the patient has found either helpful or unhelpful
- The patient's attitude toward and use of opioids, anxiolytics, or other medications, including any history of substance abuse[6].
- The patient's typical coping response for stress or pain, including the presence or absence of psychiatric disorders such as depression, anxiety, or psychosis.
- Family expectations and beliefs concerning pain, stress, and postoperative course.
- Ways the patient describes or shows pain
- The patient's knowledge of, expectations about and preferences for pain management methods and for receiving information about pain management.

MATERIAL AND METHODS

Study design:

The study was conducted at various hospitals of the Guntur district, Andhra Pradesh, India from July 2021 to Dec 2021. We recorded all the patients who undergone the various surgery. Clinical data were collected. Pain assessment and management are evaluated.

Objectives:

Our primary goal is to estimate the pain assessment and management in the patients who has undergone the Post operative surgery.

Study method:

This study was prospective observational multicenter study. Patient details were obtained from patient case sheet and required data is entered in data collection forms. The data was categorized based on various parameters like Gender, Age, Co-morbidities, Prescribed drugs, assessment of pain after surgery. Pain assessment was done by using Visual Analogue scale (VAS)[5].

Inclusion Criteria:

- Patients age >18 Years
- who are willing to participate in study

Exclusion criteria:

- Patients age <18 years
- Patients undergone treatment under ICU
- Who are not willing to participate in the study

Statistics: The analysis of data was done by using SPSS software

RESULTS AND DISCUSSION

A total number of 563 peoples were involved in the study. Out of 290 were males and 273 were females. The gender distribution of patients enrolled for the study was presented in Table 1, Figure 1.

Table 1: Gender Distribution

	Number	Percentage
Women	273	48.4
Men	290	51.6
Total	563	

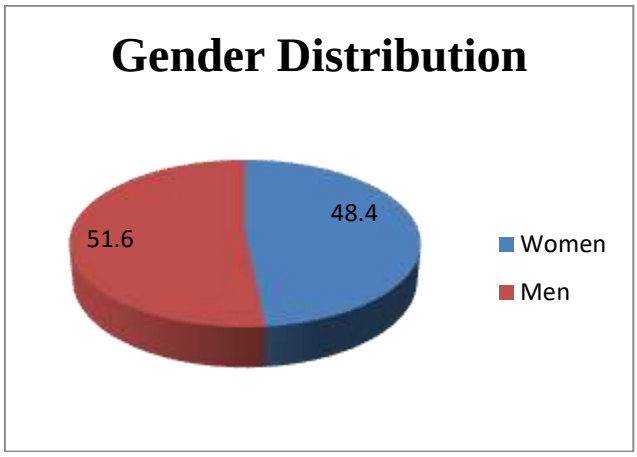

Figure 1: Gender Distribution

During the study period, the data was gathered from the various hospitals in and around Guntur District, Andhra Pradesh, India. The type of surgeries and the number of patients and the percentage of surgeries was summarized in the Table 2 and the same was presented as Figure 2. From the data we came to know that orthopedic surgeries occupy major share (150 out of 563) and vascular surgery was found to be limited occupancy (12 out of 563) in the list.

Table 2: Number of Patients undergone the various kind of surgeries

Type of Ward	No. of patients	%
Thoracic surgery	90	15.99
Gynecology	120	21.31
Orthopedics	150	26.64
Laryngology	20	3.55
Neurosurgery	25	4.44
Urology	28	4.97
Obstetrics	20	3.55
General Surgery	98	17.41
Vascular Surgery	12	2.13

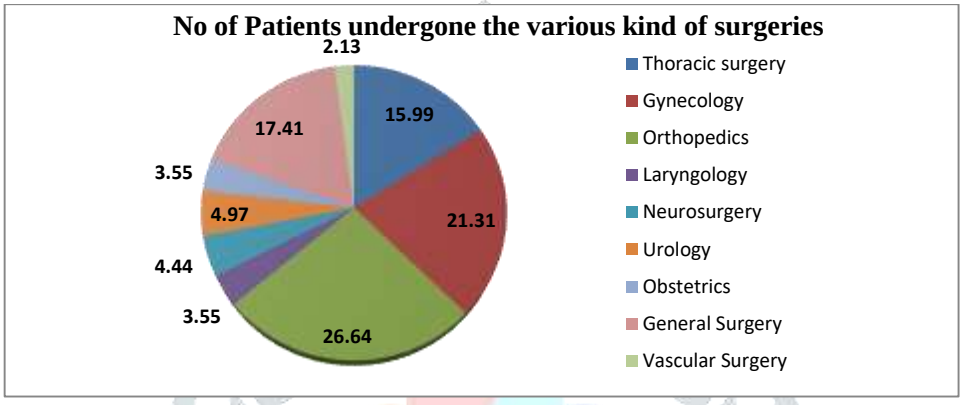

Figure 2: distribution of Patients as per kind of surgery

The pain severity was analysed after surgery as per VAS up to 24 hours with as per the following pre-fixed schedule of 4,8,12,24 hours. The results for pain intensity were shown in Table 3 and the same was represented graphically as Figure 3. The results were explained on the basis of VAS after surgery for Moderate and Severe pain.

Table 3: Patient pain intensity expressed by using VAS after surgery

VAS (h)	Mean	Moderate Pain		Severe Pain	
		Number	%	Number	%
4	34.07	221	39.25	112	19.89
8	32.06	187	33.21	80	14.21
12	27.05	135	23.98	66	11.72
24	25.04	117	20.78	50	8.88

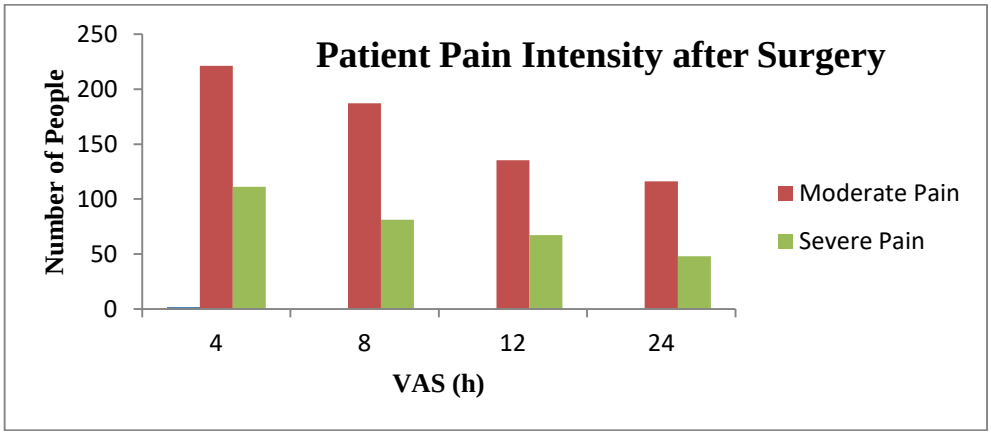

Figure 3: Patient Pain intensity as per VAS

The patients received various analgesics after surgery based on the need and Rationality. Some people were not received any kind of analgesics for postoperative pain conditions. The details of analgesics used for postoperative pain was enlisted as Table 4. And the same was presented graphically as Figure 4.

Table 4: Analgesics used in postoperative pain

Name of the Drug	Number
No Analgesic	38
Aspirin	2
Bupivacaine+ Fentanyl	34
Diclofenac	39
Gabapentin	2
Ibuprofen	2
Ketoprofen	200
Lignocaine	4
Mefenamic Acid	2
Metamizol	350
Morphine	29
Nalbuphine	2
Paracetamol	180
Tramadol	190

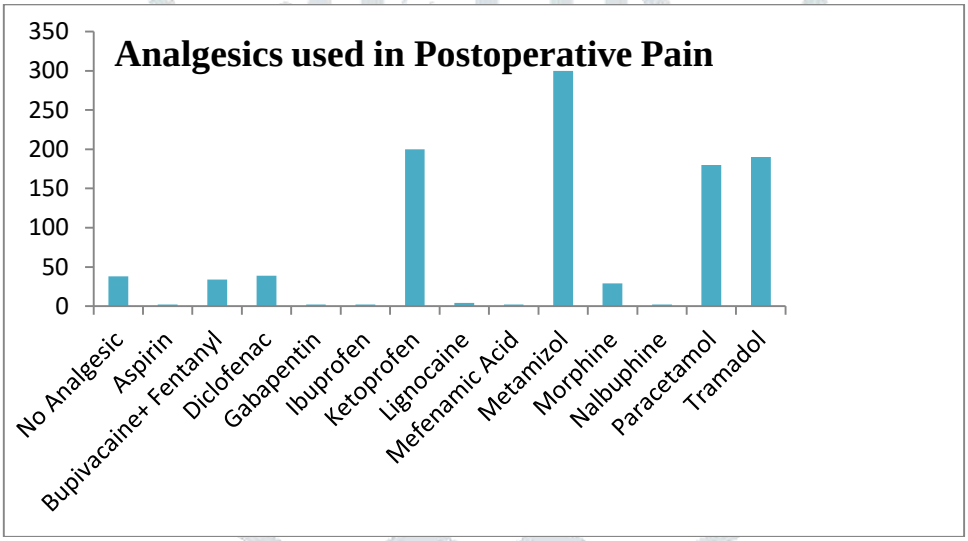

Figure 4: Distribution of Analgesics used in postoperative pain

CONCLUSION

From the results of current investigation, reveals that more number of patients faces the moderate or severe pain in the postoperative conditions, even though there were standard treatment guidelines for effective against postoperative pain. Analgesics may be failure to show effectiveness in some population. The current study concludes the type of department, occupation, genetics may show impact on severity of pain.

The results obtained in our study are in discrepancy with recommendations presented by the national guidelines for post-operative pain management.

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