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# GUIDELINES FOR ACUTE PAIN SERVICES IN BUNDELKHAND REGION :CHALLENGES FROM PEDESTAL OF REALITY TO EMERGENCING CONCEPTS

Anaesthesiology

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## ABSTRACT

Quite a large percentage of patients suffer from acute post operative pain and other forms of pain in bundelkhand region , also in rest of India. Pain management is still a major challenge. For quality patient care there should be effective pain control. Acute pain service (APS) is an emerging concept which needs to be given attention. This review article highlights the hurdles in APS and helps in finding solution to the same.

## KEYWORDS

acute pain, acute pain service , post operative pain , pain management

## INTRODUCTION

### Why focus on acute pain?

Acute pain is the most commonly experienced type of pain throughout the world. It's an important aspect of injury, surgery, childbirth and acute medical illness. Road traffic accidents and violence which inevitably lead to severe pain are among the leading causes of death and disability in many developing countries and India is no exception to it.

Despite substantial advances in pain research and management, only 30 % of patient in India receive adequate management of pain [ ref: Vijayan et al( Indian journal of pain)] [1]Uncontrolled acute pain not only leads to discomfort and suffering but can also have unwanted consequences such as delayed healing, an increased risk of morbidity and prolonged hospital stay and risk of developing chronic persistent pain.

Methods of pain treatment have improved and we have many new drugs and techniques, yet underassessment and undertreatment of pain appears to be common. This protocol of pain addresses how acute pain is managed in India and the barriers that prevents optimal pain control, along with current initiatives to overcome, as the emphasis of health care is mainly on public health including control of diseases such as malaria, HIV and TB, childhood immunization and provision of clean water.

Management of pain- whether acute or chronic - is given low priority!!

## STATUS OF ACUTE PAIN MEDICINE SERVICES IN INDIA

Acute pain service is defined as dedicated healthcare personnel driven service that asseses, monitors and treats pain and side effects of pain medications on a 24 hourbasis.

After Ready et al first started an APS in 1988 in Seattle, USA. The first APS with fully dedicated pain teams and round the clock service was started in India in the Tata Memorial Hospital, Mumbai in 2002, the second being Indian Spinal Injury centre ,New Delhi [ref Indian journal pain][2].

The field of acute pain medicine is still in it's infancy in India, and the possible hurdles could be as follows:

1)lack of high priority for pain management

There is no national/state policy; the hospital administration is less likely to be concerned ,as more importance being given to other health problems[3].

2) lack of resources, funds and manpower

A dedicated staff and cost effective techniques and methods need to be implemented.

2) poor attitudes and lack of pain education in health care professionals

A solid foundation of knowledge and a positive attitude are a must.However there are many lacunae ,inadequacies in pain education for medical students, nurses and advanced trainees[4].

4) patient's attitude and perception about pain

Low expectations of post operative pain relief encourage the persistence of poor standards for analgesia. Hence , patient education is the solution.

5) Difficulty in procuring opioids because of strict regulatory laws based on fear of misuse and diversion of opioids.[5]

6)lack of knowledge about economic implications of acute pain services

There is undue fear that APS implementation will increase health costs that will lead to negative publicity of hospital. However many studies[6] from other countries show that it will lead to reduced expenditure because of reduced stay in recovery areas and ICU , reduced nursing time, reduced post operative complications and hospital stay.

## DISCUSSION

Pain relief per se does not significantly improve the postoperative outcome, with the exception of patient satisfaction and pulmonary complications. Postoperative morbidity and the length of hospital stay are dependent on many factors, including preoperative information, quality of analgesia and existing programs for postoperative care and rehabilitation, including orders for mobilization, oral nutrition and discharge criteria.

Most patients, physicians, surgeons and nurses still consider moderate to severe pain an acceptable consequence of surgical interventions. Undertreatment of pain has been determined to have a negative impact on short term recovery and may even have a detrimental long term effect on health. Three reasons for the undertreatment of pain relate to fear of narcotic addiction ,poor communication among staff and perception by patients that medications for pain are neither necessary nor good .This has inspired many institutions to develop Acute Pain Service(APS).Charging APS services may have several advantages such as increased awareness and demand among patients for pain management, an incentive and accountability of healthcare professionals and creation of fund for development of pain services.

The introduction of APS has led to a successful and safe implementation of multimodal pain management strategies and an increase in the use of specialised pain relief methods. A keypoint in improving postoperative pain management is the regular assessment and documentation of pain. The 'golden rule' of pain assessment is :'Do not forget to ask the patient!'. Self assessment is in fact the single most reliable indicator of the existence and the intensity of pain and the efficacy of pain treatment. An APS in the hospital can improve both the knowledge of pain treatment and patient satisfaction; indeed, despite the fact that they may experience high levels of pain, most patients are satisfied with the efforts that nurses and physicians make to manage

pain.
A surveyby Jain et al[7] showed that in only 45 % hospitals anaesthesiologists were involved in post operative pain and non-anesthesiologists (55%) like surgeons or nurses were mainly responsible for pain management in the wards, where anaesthesiologist is the main key person in relieving intra- op as well as post- op pain, we as anaesthesiologists should come forward and lead the team and form an APS team which will work round the clock to alleviate pain.
The need of the hour is to overcome the barriers!!

## PRINCIPLES OF ACUTE PAIN MANAGEMENT

Adverse physiological and psychological effects may result from unrelieved severe acute pain, hence effective treatment may reduce the incidence of post operative morbidity and increase earlier discharge from hospital and preventive treatment of post operative pain may reduce the incidence of chronic pain.

Effective management requires tailoring of treatment regimens to the individual patient which will depend on close liason with and education and training of all staff, education and involvement of patient and their carers, formal protocols and guidelines and formal quality assurance programs to regularly evaluate the effectiveness of acute pain management. Group of patients requiring particular attention are children, pregnant ,elderly, patient with OSA, hepatic or renal disease, substance abuse disorder, cognitive behavioural and/or sensory impairments.

## EDUCATION

Education regarding acute pain management should be part of the medical undergraduate core curriculum. Appropriate knowledge should be supplemented at postgraduate level for all other staff and accredition of nursing staff are essential. Patient attitude and belief can be modified by discussion regarding analgesia , options available and educating the patient.

## PHARMACOLOGICAL THERAPIES

Drugs that may be used include opioid, NSAIDS,& LAs as well as adjuvant agents such as antidepressants, anticonvulsants and membrane stabilisers. Careful titration and individualisation of dose regimen should be done .Multimodal analgesia Improves the effectiveness of acute pain management. Drug administration can be oral ,sc, im, iv ,epidural ,intrathecal, inhalational, rectal ,transdermal or transmucosal.

Some specialised analgesia delivery techniques include
*Patient controlled analgesia
*Epidural and intrathecal
*Other regional analgesiaprocedures
*Continuous infusion of opioids ,LA ,ketamine and other drugs.

## NON PHARMACOLOGICAL

These are complimentary to pharmacological, which include psychological interventions, acupuncture, transcutaneous electrical nerve stimulation and physical therapy.

## ASSESSMENT OF ANALGESIC EFFICACY & ADVERSE EFFECTS

Regular assessment & documentation both at rest and during activity should be done.

Pain relief should also be assessed with respect to adequate function including physical therapy requirements and mobilization.

## THE CONCEPT OF ACUTE PAIN SERVICES IN INDIA

The important components are:-
A-multidisciplinary committee comprising anesthetists, surgeons,nursesand pharmacist supported by the secretarial staff
B – acute pain management protocols and modalities ofAPS
C-Regular pain assessment methods and guidelines to control pain within a defined time scale
D-continuous professional development and teaching programs

E- regular meetings, cooperation and networking amongst the member of committee

F-patient education and information regarding pain, treatment options and their side effects
G-safe and secure central data keeping for regular followup
H-audits on methods, patient satisfaction and cost effectiveness

The APS model has to be simple and cost effective to be a successful model.The pain management team must be a motivated and enthusiastic team of professionals with diverse skills. Patient should also be educated that any pain above 3 ( on a 0-10 VAS) is not acceptable and they should inform the attending staff and seek intervention[8].A satisfaction questionnaire [9]provides useful baseline data for evaluating the quality of an institution's overall pain management program, and, furthermore, that the information it provides can be used to develop a plan for improving pain management.

| Questions | No. of responses |
|---|---|
| Who looks after acute pain service in the day | |
| Anesthetist | 44 |
| Surgeons | 1 |
| Nurses | 1 |
| Others | 22 |
| Who looks after the night calls/emergency pain calls | |
| Dedicated pain team | 3 |
| Anesthetist on call | 45 |
| Surgeons | 1 |
| Floor sister | 4 |
| Others (specify) | 15 |
| What method of post-operative pain management you use in your hospital | |
| Intermittent intravenous boluses | 6 |
| More than one technique | 50 |
| All techniques | 11 |
| Others (specify) | 1 |
| How do you measure pain?(missing data 1) | |
| Visual analogue scale | 25 |
| Numeric rating scale | 9 |
| Subjective | 15 |
| Others (combination of above) | 18 |
| How often is pain measured in the ward? (missing data 1) | |
| Occasionally | 6 |
| Once a day | 10 |
| 2-3 times | 26 |
| With every TPR charting | 25 |
| Do you have written protocols (missing data-3) | Yes-31, No-34 |
| Do you use opioids in the wards? | |
| No | 11 |
| Yes, only IV route | 34 |
| Yes, only epidural | 3 |
| Yes, other routes and more than one routes | 20 |
| Do you have an opioid policy (opioid cupboard/ register) in your hospital? | Yes-59, No-9 |

*APS = Acute pain service, TPR = Temperature, pulse rate and respiratory rate*

## CONCLUSION

Gone are the days when perioperative pain and discomfort used to be the most fearsome experience for any patient. Introduction of APS ( including regional anaesthesia service) will increase the awareness among the patients and medical professionals that proper pain management in perioperative period is important to enhance patients wellbeing.

To overcome the barriers ,to start and run APS, we need to be aware of our own doctors, nurses and paramedics about acute pain. We need to improve resources , make available potent analgesics and take educational initiatives and monthly audit to strengthen the services. For this , a change in the attitude of healthcare professionals and patient is very important. All healthcare providers need to be sensitive to the humanitarian aspect of pain and the right of every human to have pain relief.

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