

Another paradigm shift – Acceptable post operative pain?

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Declarations

- · Nothing to declare
- My opinions and data from published journals

Really a paradigm shift? Or Just bad press?

- RCS Report in 1990 highlighted poor pain relief after surgery
- Acute Pain Services introduced
- Kehlet 1994: Pain relief attenuated stress response and facilitates early mobilisation
- ERAS patients warned to expect some post operative pain BUT
- \bullet Opioids are addictive, even intermediate strength
- $\bullet \ \mathsf{MR} \ \mathsf{Opioids} \ \mathsf{associated} \ \mathsf{with} \ \mathsf{Opioid} \ \mathsf{Induced} \ \mathsf{Ventilatory} \ \mathsf{Impairment}$
- Patients often accept pain, but express high satisfaction scores

Surgery and Pain

Over 300 million operations performed globally Suboptimal Pain management leads to:

- Increase in morbidity
- Impaired physical function
- Reduction in Quality of life
- · Prolonged opioid use during and after hospitalisation
- Increases cost of care
- Appears to trigger persistent pain

How big is the problem of post –operative pain?

- 80% of patients experience post operative pain
- Of those, 88% have moderate or severe pain

Opioid Epidemic declared in USA in 2017

- I in 16 patients addicted even if opioid naïve
- Risk of addiction increases with length of use, starting at day 3, with sharpest increase at day 5 and after 31st day of consumption
- · Leading cause of death in USA, surpassed only by MVAs
- 600000 deaths related to prescription opioids
- 2 million US residents >12 years old addicted to prescription opioids

Opioid Epidemic Drivers

- Pain as 5th Vital Sign
- Charges related to administration of opioids hospitals rewarded for reacting to NPS of patients
- Reuben studies and Perdue Pharma Increased use of MR opioids
- $\bullet \ \, \text{Opioids easily available} \text{state hopping in US increases availability} \\$

UK problem

- Opioid prescriptions up by 400% in past decade
- 2012, UK was the largest consumer of opioids in Europe
- \bullet 2015 – 1 million in UK estimated to be dependent on codeine based analgesics
- Opioid overdoses have doubled

Aberdeen Figures 2018

- 123 patients discharged on strong opioids
- 54 stopped at 6 weeks 27 sent home on a deprescribing plan, 27 left to GP
 17 patients lost to follow up due to lack of permission to phone
- · 16 unable to contact
- 5 switched to intermediate strength opioid
- 11 still reducing
- 7 no change at all
- 3 had kept Shortec only
- 1 GP called for advice
- 5 went to Palliative care
- · 4 no change as were awaiting further surgery

Drivers for Addiction

- MR Opioids
- Oxycodone
- Intermediate strength opioids "weak" opioid, efficacy less but still have the addictive properties
- Repeat Prescriptions
- Over the counter "weak opioids"
- Use of family members' prescriptions

UK Response

- Public Health England "Opioids Aware"
- Dept of Transport " Drug driving " includes prescription opioids
- More research needs on multi-dimensional pain scores in acute pain
- De-prescribing plan needs to be approached with discharge counselling with written and verbal advice for the individual patient
- Procedures required to prevent repeat prescriptions in the community
- Prevention of opioid diversion required

UK Response

- Oxycodone should be second line only particularly for ERAS
- Compound analgesics no use as hinder de-prescribing
- Yearly review for those on opioids
- BNF requires updating in terms of advice regarding dependence
- GMC should review Post Graduate curricula so that they all contain education regarding risks of addiction with prescribed opioids
- 120 mgs of Morphine or equivalent maximum in 24 hours.
- Suggested reduction by 10% weekly or 2 weekly for patients

American Pain Society and ASA 2017 Recommendations

- Multi-modal analgesia or a variety of medications and techniques combined with non pharmacological interventions
- Paracetamol and NSAIDS should be part of multi-modal analgesia
- Neuraxial analgesia should be used for major thoracic and abdominal procedures
- Site- specific regional anaesthetic techniques should be used where evidence indicates efficacy

MR Opioids and Acute Pain

- Ideally avoided in opioid naïve patients
- High incidence of OIVI especially if concomitant use of Gabapentinoids or Benzodiazepines
- · Associated with death and hypoxia in hospital and the community
- ANZCA opioids should not be titrated to unidimensional pain scores alone, base doses on age, and sedation scores should be assessed regularly

So... the future?

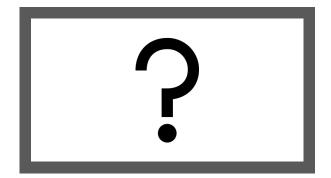
- Functional Pain Scoring Scott and McDonald ABC
- Procedure Specific Analgesic Strategies simple analgesia plus regional techniques
- Non pharmacological strategies such as psychological preparation, use of cold compression etc
- PCAs and epidurals avoided due to restriction of mobility
- Oral route preferable, and IR opioids in age appropriate doses

Contradictions

- USA recommending neuraxial analgesia mobility?
- Addiction studies show that addicts prefer IR medications, so whilst safety may be better, IR might drive more addiction
- $\bullet \ \mathsf{Psychological} \ \mathsf{preparation} \mathsf{acceptable} \ \mathsf{post} \ \mathsf{operative} \ \mathsf{pain} ?$

Summary

- Acute post –operative pain still under-treated
- NRS outdated and needs to be replace by a validated functional pain scoring scale, probably multi-dimensional
- Opioids falling into disrepute in terms of dependence
- MR opioids associated with OIVI and addiction, best avoided in opioid naïve patients
- Tighter follow up and de-prescribing for patients, and discharge prescriptions tightened up and individualised



References

- https://www.rcoa.ac.uk/faculty-of-pain-medicine/opioids-aware
- https://www.ncbi.nlm.nih.gov/pubmed/29026331
- https://www.ncbi.nlm.nih.gov/pubmed/29121311
- https://www.ncbi.nlm.nih.gov/pubmed/29121311
- https://www.rcoa.ac.uk/system/files/Bulletin107.pdf
- https://www.ncbi.nlm.nih.gov/pubmed/29452798
- https://www.ncbi.nlm.nih.gov/pubmed/29225793