

# No Pain, No Gain?

## Post-operative patient satisfaction of pain relief following lower limb Arthroplasty

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### Aims

To assess the quality of pain relief and symptom management provided to post-operative THR/TKR patients with the recommended analgesic regime

### Objectives

To identify:

- Effectiveness of the oxycodone regime combined with recommended regular NSAID's, anti-emetics and laxatives
- If PONV is evident in hospital and at home
- The length of time Oxycodone is required
- Whether adequate supply of 7-10 days worth of oxycodone TTO was sufficient

### Methods

#### Audit

Anaesthetic audit in 2014 of TKR/THR Patients concluded:

- Inconsistent prescribing of analgesia and anti-emetics
- TKR patients suffered moderate to severe pain limiting function and delaying discharge

Standardised analgesic regimen involving oxycodone prescription started in August 2014

#### Re-Audit

Re-audit of 76 patients on new regimen finds majority of patients in moderate/severe pain due to:

- Delay in first dose Oxycodone MR (Oxycontin)
- Insufficient Oxycodone MR dose
- Nursing delay in PRN Oxycodone (Oxynorm) administration as it is a controlled drug

New regimen devised to take these factors into account...

### Recommended Analgesic Prescription

#### Regular drugs

Paracetamol 1G QDS  
+/- Ibuprofen 400mg TDS  
Oxycodone MR (Oxycontin) BD  
Ondansetron 4 - 8mg TDS  
Senna (nocte)

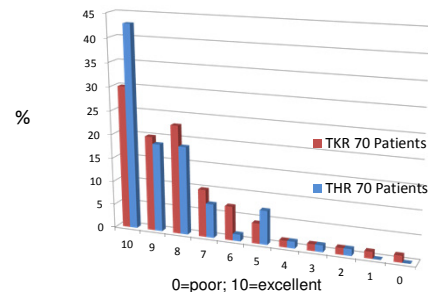
#### PRN Drugs

Oramorph 10-20mg hourly  
Lactulose 15mls BD  
Cyclizine 50mg 8 hourly  
Naloxone

- Anonymous postal questionnaire sent to all patients a week after having THR/TKR Sept 2014 – Dec 2014. Patient to return questionnaire after 15 days

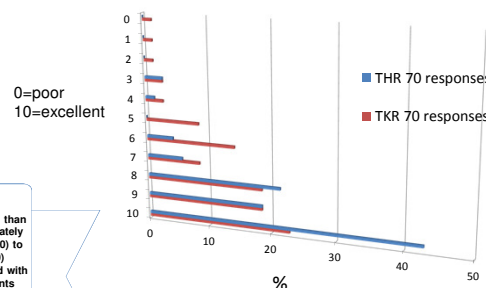
- Total questionnaires sent: THR-159; TKR-159. Total questionnaires returned: THR-70; TKR-70

### How Would You Rate Your Pain Relief in Hospital?



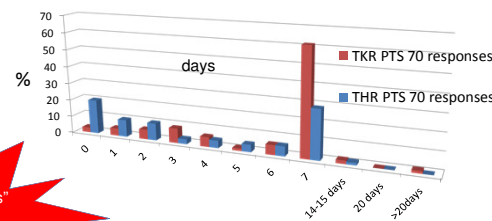
"I had no pain in hospital or at home"

### How Would You Rate Your Pain Relief at Home?



TKR is more painful than THR with approximately 73% with good (8/10) to excellent (10/10) analgesia, compared with 83% of THR patients

### How Long Did You Use Oxycontin as More than Once Daily Dose?

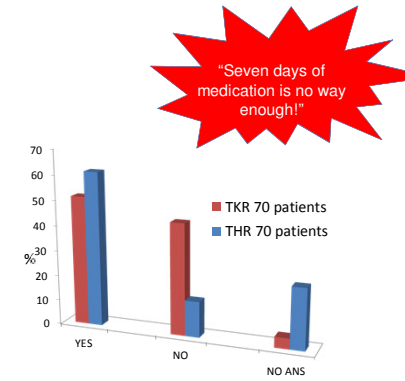


"Some hallucinations"  
"Oxycontin affected my head"

### Results

#### Did You Feel the Length of Oxycontin Duration was Adequate for Pain Relief?

Post operative nausea and vomiting was well controlled with 70% of THR patients rating it good (8/10) to excellent (10/10)



"Seven days of medication is no way enough!"

#### What other Painkillers Did You Use at Home, besides Oxycontin?

"Oxycontin is easier to use than Tramadol as less side effects than last time."

Analgesic Drugs	TKR (70)	THR (70)
PCM only	23	23
NSAID only	2	1
PCM & NSAID	24	25
TRAMADOL only	1	0
PCM & TRAMADOL	3	3
PCM/TRAMADOL/NSAID	2	0
PCM/DRAMORPH	1	2
COCODAMOL	2	1
COCODAMOL/NSAID	5	1
PCM/ CODEINE	2	6
PCM/CODEINE/NSAID	2	1
Other combinations	2	6
Adjuvants eg: gabapentin	1	1

### Conclusions

- Patients are generally satisfied with pain relief following TKR/THR
- Most patients following TKR require stronger analgesia post operatively than THR
- TKR patients on average require 7 days Oxycontin TTO, some felt up to 15-20 days would be best
- Not all patients (14) following THR, required Oxycodone
- PONV is generally well controlled
- Paracetamol +/- NSAID's are the most common co-analgesics

### Recommendations

- All patients opiate medication should be reviewed post-operatively on Day 1 or 2 and TTOs individualised before discharge
- Consider if THR patients need Oxycontin?
- 2 different laxatives to be offered regularly, not PRN
- Continue to audit (post-operative pain relief) to include constipation. Review post op discharge information.

#### References:

- Derry CJ, Moore RA; Single dose oral ibuprofen plus oxycodone for acute postoperative pain in adults; Cochrane Database Syst Rev, 26;6 June 2013
- Lombardi AV, Berend KR, Adams JB; A rapid recovery program: early home and pain free; Orthopedics. Vol 7;33(9):656, Sep 2010

#### Acknowledgments

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