Centre for Sustainable Delivery

NHS SCOTLAND

Arthroplasty Rehabilitation In Scotland Endeavour (ARISE):

Perioperative Care Protocol for Non-Complex Primary Total Hip/Knee or Unicompartmental Knee Replacement

June 2023

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Background

This pathway document provides an overview of the nationally agreed essential elements for an Enhanced Recovery After Surgery (ERAS) programme. It covers non-complex total hip, knee, and uni-compartmental knee replacements. Implementation will assist in same-day and next-day discharge.

Local standardised protocols for specific elements should be utilised in conjunction with this document.

Pathway recommendations

Preoperative

- Pre-operative education is essential - this can take the form of written/ oral / audio visual or face to face.
- The anticipated LoS (Length of Stay) should be 0-2 days (this is just a target; patients should be D/C when they meet the criteria below).
- Pre-admission should review and optimise pre-existing comorbidities as appropriate (e.g. anaemia, smoking and alcohol cessation).
- Acute Kidney Injury (AKI) risk assessment and management should be undertaken at pre-operative assessment as per local protocol (e.g. withhold ACE/ARB on day of surgery).
- Day of surgery admission, with fasting from 6 hours for food and minimised fasting for clear fluids as per locally agreed pathway. Following Sip to Send principles is encouraged.

Intraoperative

- Use of tourniquet as per local protocol
- No routine urinary catheterisation
- Anaesthetic as per local protocol (e.g. Spinal or GA – General Anaesthetic). Opioids should only be used rarely for specific patients and indications (it may necessitate an overnight stay and should not be routine practice)
- Local Anaesthetic infiltration to joint as per local protocol.
- Regional nerve block as per local protocol (knees only), consideration of effect on mobilisation should be paramount.
- Steroids as per local protocol – A minimum dose of 10mg is recommended (Lavand'homme et al 2022)
- Routine use of Tranexamic Acid (TXA)
- Dual Antiemetics: as per local protocol (e.g. consider in conjunction with Dexamethasone)
- Fluid Management – consideration given to suspected blood loss and fasting.

Postoperative

- Multimodal Analgesia including oral paracetamol + NSAID (Non-steroidal anti-inflammatory drug OR Cox 2 Inhibitor 6 hourly (if not contraindicated)).
- Use of Step 3 Analgesia as per local protocol e.g. restricted time-limited dosing if using long-acting Step 3 opioid preparations for example, 24hrs for THR (Total Hip Arthroplasty) / 48hrs for TKR (Total Knee Arthroplasty). Short acting step 3 Analgesia may be used alone in preference or addition to long-acting preparations as above for functional pain with limited post-operative provision as per local protocol.

- Ensure adequate step down from strong opioids planned.
- Antiemetic & bowel management as per local protocol.
- Discontinue IV Fluids in recovery & commence oral intake.
- Mobilise as soon as possible. Nursing and AHP staff should be enabled to assess and begin as soon as possible.

Functional criterion led discharge (based on Husted et al 2011)

- Ability to get dressed and independence with personal care.
- Ability to get in/out of bed/chair/toilet independently.
- Mobile with appropriate walking aid and complete stairs where appropriate.
- Sufficient oral pain management (VAS <5 on activity).
- Clear instructions and a 24 hour contact number within Secondary Care should be provided to the patient on discharge for advice and if required emergency contact details available. Agreed follow up should also be arranged prior to discharge
- Where appropriate, FitNotes should be provided by a member of the MDT from Secondary Care. The process for this should be established.

References and further resources

References

Husted H, Lunn TH, Troelsen A, Gaarn-Larsen L, Kristensen BB, Kehlet H. Why still in hospital after fast-track hip and knee arthroplasty? Acta Orthop. 2011 Dec;82(6):679-84. doi: 10.3109/17453674.2011.636682. Epub 2011 Nov 9. PMID: 22066560; PMCID: PMC3247885.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3247885/

Sip till Send (https://www.nhstaysidecdn.scot.nhs.uk/NHSTaysideWeb/idcplg?IdcService=GET_SECURE_FILE&dDocName=PROD_249414&Rendition=web&RevisionSelectionMethod=LatestReleased&noSaveAs=1)

Lavand'homme, Patricia M.; Kehlet, Henrik; Rawal, Narinder; Joshi, Girish P.; on behalf of the PROSPECT Working Group of the European Society of Regional Anaesthesia and Pain Therapy (ESRA). Pain management after total knee arthroplasty: PROcedure SPEcific Postoperative Pain ManagemenT recommendations. European Journal of Anaesthesiology 39(9):p 743-757, September 2022. | DOI: 10.1097/EJA.0000000000001691

https://journals.lww.com/ejanaesthesiology/Fulltext/2022/09000/Pain_management_after_total_knee_arthroplasty_.4.aspx

Endorsement

This pathway is endorsed by the Scottish Committee for Orthopaedics and Trauma (2023)

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