

# Peri-operative Sarcoma Pathway in Children and Adolescents

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## Background

The management of bone sarcoma is centralised and The Great North Children's Hospital is one of only five centres in the country providing this service<sup>1</sup>. Referral to a specialist centre is essential prior to biopsy<sup>2</sup> and children attend from across the UK for management at GNCH, where all services are accessible under one roof.

## Current practice

- Within our centre there was no tailored pathway for patients presenting for this, often, life-changing surgery.
- Children attending often have significant anxiety so preparation prior to surgery is imperative in attempting to prevent or reduce further problems, such as chronic pain.
- Children presenting for surgery were also attending our centre with variable information from their local hospital, necessitating the need for a structured approach to ensure high quality care.

## Strategy for change

We performed a literature search to answer the question:

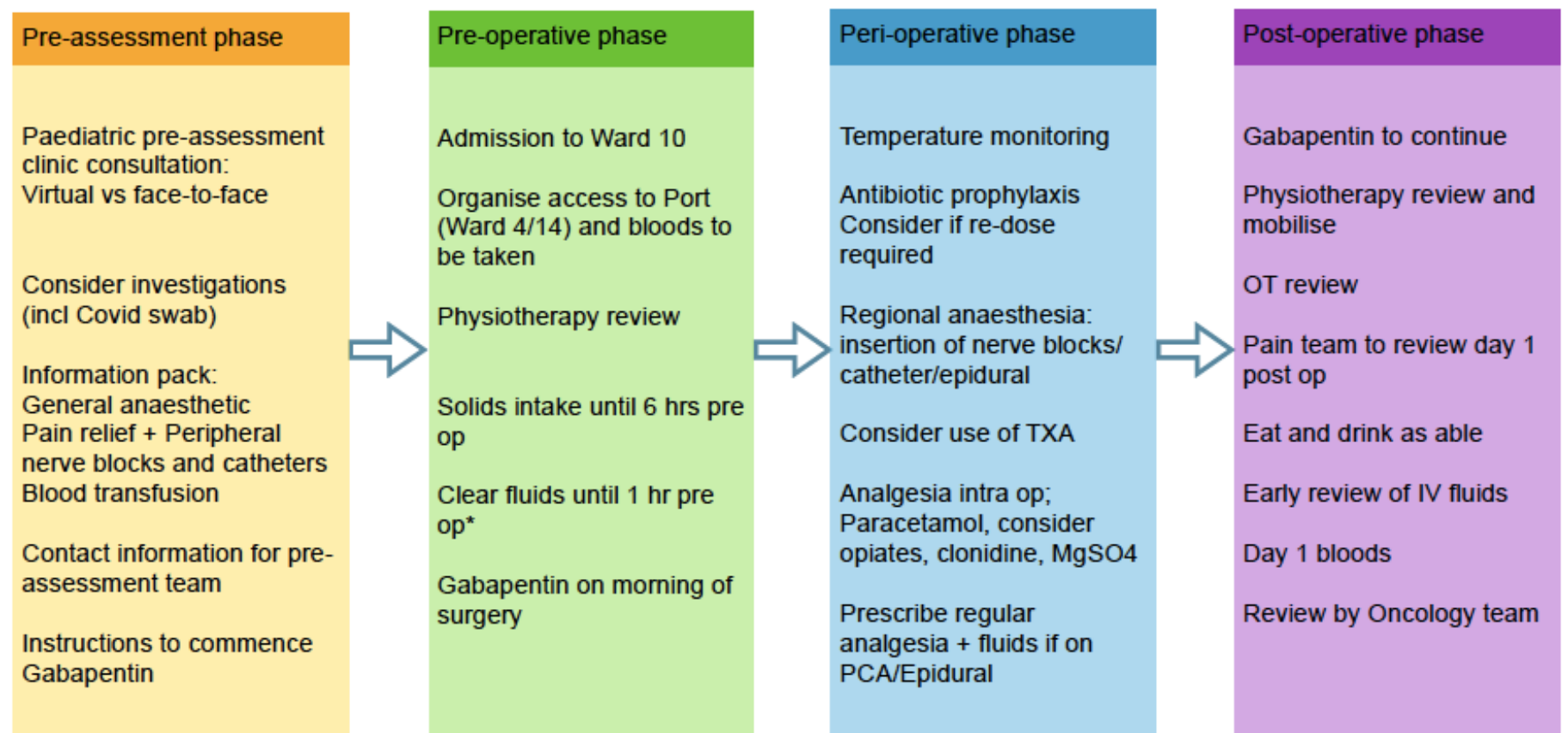
“What is the current evidence for analgesic techniques in patients undergoing surgery for bone sarcoma?”

This search focussed specifically on:

1. Analgesia used in the surgical management of bone sarcoma
2. Use of regional anaesthesia and nerve catheters
3. Use of gabapentinoids for analgesia in patients undergoing reconstructive limb surgery or amputation.

## Pathway Development

Through collaboration with a range of specialties, we created a pathway. This provides structure and recommends specific interventions, promoting high quality care. It encompasses all aspects of the peri-operative journey and appreciates the multidisciplinary approach required.



## Outcome measures

There have been challenges in identifying and commencing patients on this pathway. As well as encouraging the Orthopaedic and Pre-assessment teams to identify these patients, an opportunity also lies at the point of attendance for biopsy.

Following a 6-month trial period, we will review all of the patients that have been commenced on this pathway, specifically looking at:

1. Post-operative pain scores, reviewing our practices in regional anaesthesia
2. Satisfaction scores with patients and parents/carers, with an aim to improve the quality of care and patient experience.

## Lessons learnt

There have been a number of hurdles in developing this pathway; logistical challenges of co-ordinating the care for children presenting from all over the UK being the most obvious.

We have overcome the challenges of providing regional anaesthesia in these cases by working closely with the regional anaesthetists within the wider department and planning their involvement on a case-by-case basis.

The pathway continues to evolve as we strive to provide the best experience possible, within the worst of circumstances.

We hope that this inspires others to strive to improve the quality of care that they provide.

## References

1. British Sarcoma Group. <https://britishsarcomagroup.org.uk/>

2. Gerrand, C. 2017. Sarcoma Expert Advisory Group (SAG) Clinical Guidelines. [https://www.newcastle-hospitals.org.uk/\\_assets/media/downloads/Clinical\\_guidelines\\_for\\_bone\\_and\\_soft\\_tissue\\_tumours\\_2017\\_final\\_version.pdf](https://www.newcastle-hospitals.org.uk/_assets/media/downloads/Clinical_guidelines_for_bone_and_soft_tissue_tumours_2017_final_version.pdf)