Derby and Derbyshire
Integrated Care Board

CLINICAL POLICY ADVISORY GROUP (CPAG)

Surgical removal of kidney stones

Statement

NHS Derby and Derbyshire ICB, in line with its principles for evidence-based interventions has deemed the Surgical removal of kidney stones should not routinely be commissioned unless the criteria within this policy are met.

These commissioning intentions will be reviewed periodically. This is to ensure affordability against other services commissioned by the ICB.

1. Background

Urinary tract stones are amongst the most common condition dealt with by urologists with an estimated 6,000 patients admitted to hospital per year with the condition. Shockwave lithotripsy (SWL) is a non-surgical technique for treating these stones in the kidney or ureter. The technique uses high energy shockwaves to break the stones into smaller fragments which can then pass spontaneously.

Stones can be observed to see if they pass spontaneously, or treated with shockwave lithotripsy, or surgical techniques such as ureteroscopy (URS) and percutaneous stone surgery (PCNL), both of which may involve placing a stent.

The optimal management depends on the type, size and location of the stone as well as patient factors such as co-morbidity and pregnancy. For appropriate stones SWL is advantageous as it is non-invasive and so has fewer major adverse events than surgery.

2. Recommendation

This policy applies to adults aged 19 years and over

Surgical Indications: Adult renal stones
• <5mm: If asymptomatic consider watchful waiting • 5-10mm: If not suitable for watchful waiting offer SWL as first-line treatment (unless contra-indicated or not targetable) • 10-20mm: Consider SWL as first-line treatment if treatment can be given in a timely fashion. URS can also be considered if SWL is contraindicated or ineffective • Over 20mm (including staghorn): Offer percutaneous nephrolithotomy (PCNL) as first-line treatment

Surgical Indications: Adult ureteric stones
• <5mm: If asymptomatic consider watchful waiting with medical therapy e.g. Alpha blocker for use with distal ureteric stones • 5-10mm: Offer SWL as first-line treatment where it can be given in a timely fashion (unless contra-indicated or not targetable) • 10-20mm: Offer URS but consider SWL if local facilities allow stone clearance within 4 weeks

3. Rationale for Recommendation

Criteria based on NICE Guidance [NG118] (recommendation 1.5) Renal and ureteric stones: assessment and management.

ESWL will not always be possible due to lack of access to a lithotripter or appropriately trained staff. As it is often the optimal treatment, hospitals should consider purchasing this equipment or liaising with neighboring hospitals which do have these facilities.

Adult renal stones
Asymptomatic renal stones less than 5mm may pass spontaneously and so this carries less risk than intervention in the first instance. Watchful waiting for larger stones carries greater risk but in patients with co-morbidities should still be considered as these risks may be less than those of intervention.

For renal stones less than 10mm SWL has shorter hospital stays, less pain and fewer major

adverse events compared to URS, although URS normally needs fewer treatments. Overall, as SWL is non-invasive with fewer major adverse events this should be considered first-line treatment. For renal stones between 10mm and 20mm the optimal strategy depends on the stone but would be either SWL or URS. Because SWL is non-invasive with fewer major adverse events this could be considered before URS if treatments can be given in a timely fashion so minimising delay between treatments and SWL is not contraindicated.

Adult ureteric stones
For Ureteric stones less than 10mm SWL showed benefits in terms of readmission and fewer major adverse events although URS had lower retreatment rates. When a stent is used this is often only a temporary measure with additional surgery required to remove the stone. Therefore, SWL should be considered first-line when it is not contra-indicated and the stone is targetable.

For ureteric stones between 10mm and 20mm URS should be offered, though because SWL has been shown to result in shorter hospital stays, less pain and fewer adverse events, it could be considered if stone clearance is possible within four weeks.

4. Personalised Care

Personalised care simply means that people have more control and choice when it comes to the way their care is planned and delivered, considering their individual needs, preferences and circumstances. It includes supporting shared decision making and self-management.
Shared decision-making means people are supported to:

- *understand the care, treatment and support options available and the risks, benefits and consequences of those options*
- *decide on a preferred course of action, based on evidence based, good quality information and their personal preferences.*

Supported self-management means increasing the knowledge, skills and confidence a person has in managing their own health and care. This involves using self-management education, peer support, and health coaching.
Decision support tools, also called patient decision aids support shared decision making by making treatment, care and support options explicit. They provide evidence-based information about the associated benefits/harms and help patients to consider what matters most to them in relation to the possible outcomes, including doing nothing.

5. Useful Resources

- BRAN leaflet – Shared decision making supports individuals to make the right decision for them. This easy-to-use leaflet supports this people to consider their treatment options.

6. References

- Surgical removal of kidney stones - EBI – Accessed 05/02/25
- NICE guideline (2019) Renal and ureteric stones: assessment and management [NG118]
- Harrison S (2018) Urology, GIRFT Programme National Specialty Report. GIRFT

7. Appendices

Appendix 1 - Consultation

All relevant providers/stakeholders will be consulted via a named link consultant/specialist. Views expressed should be representative of the provider/stakeholder organisation. CPAG will consider all views to inform a consensus decision, noting that sometimes individual views and opinions will differ.

Consultee	**Date**
Academy of Medical Royal Colleges	August 2021
Consultant Urologist CRHFT	August 2021
Consultant Urologist UHDBFT	August 2021
Clinical Policies Advisory Group	August 2021
Clinical Lay Commissioning Committee	August 2021
Academy of Medical Royal Colleges	September 2024
Clinical Policy Advisory Group (CPAG)	March 2025

Appendix 2 - Document Update

Document Update	**Date Updated**
Version 1.0 New Local DDICB policy– aligned to Academy of Medical Royal Colleges EBI Guidance	March 2025