BIRMINGHAM NUFFIELD HOSPITAL

PHYSIOTHERAPY DEPARTMENT

CLINICAL GUIDELINES FOR THE TREATMENT OF BIRMINGHAM HIP RESURFACING

ACUTE IN PATIENT STAY

INTRODUCTION

These guidelines do not replace the need for physiotherapy assessment for all BHR (Birmingham Hip Resurfacing) patients, and must be undertaken prior to implementation of any treatment or plan.

The surgery involves a southern or posterioro - lateral approach. The patient will return from theatre with two drains insitu, which will be removed 10-24 hours, and before mobilisation commences.

The operation notes are read prior to initial treatment to become familiar with the surgical technique and any limitations.

Knowledge of systemic observations is necessary to allow complete assessment of the patient and to enable appropriate treatment planning.

AIMS OF PHYSIOTHERAPY INTERVENTION

Physiotherapy at this stage focuses around gaining functional range of movement and ensuring good muscle control allowing the attainment of jointly agreed functional goals.

PRECAUTIONS

The precautions following BHR are less rigid than for total joint arthroplasty, however it is important to ensure the patient is aware of certain limitations. The joint should not be flexed beyond 90°, abduction past mid - line is avoided as should all weight bearing twisting movements. It is also imperative that patients do not sit with their feet on a foot stool to prevent any abnormal forces on the new resurfacing.

The precautions should be adhered to for the first 8 weeks and patients can return to sports at 3 months.

Currently four surgeons (McMinn, Treacy, Chana and Banerjee) undertake BHR at the Birmingham Nuffield Hospital and their techniques and post operative instructions are similar. Mr McMinn’s patients must not be referred to the hydrotherapy pool during the first 6 weeks.

The majority of patients are discharged at 6 days post operation, however if goals are achieved earlier or later this may change. Routine follow up physiotherapy is not always necessary, but should be organised if the discharging physiotherapist deems it appropriate.

Day One

- Drains are removed with in first 24 hours, but definitely prior to mobilisation.
- Early active exercises should be commenced:

  - SQC's
  - Active hip flexion on sliding board
  - IRQ's
  - SGC's

- Mobility training should commence and must be supervised by a physiotherapist. A frame is used for patient comfort.
- None of the patients sit at this early stage secondary to the approach used.

Day Two

- Mobility becomes a focus and re education of gait is paramount. Progression to elbow crutches can be made if necessary and the patient is encouraged to mobilise in the corridor.
- The exercises are progressed if needed:

  -Abduction in lying with sliding board

- The patient is able to sit for short periods, taking care to ensure normal alignment of the lower limbs.
- Rehabilitation will focus around patient orientated goals i.e. transfers, gait.

Day Three

- Exercises can be progressed:

  - Abduction in lying if not achieved on day two
  - MRQ's in chair
  - Sit to stand
  - Calf raises in chair

- Mobility distance is increased and the patient's are encouraged to start mobilising independently in the corridor. Elbow crutches are issued if not done so on day two.

- The patient is taught to ascend and descend stairs with appropriate aid.

Day Four

- The patient should be independently demonstrating exercises and undertaking 3-4 times per day.

- Mobility is progressed in terms of distance and aid: transfer to two sticks if able and to four point gait pattern.

- Commence planning for discharge - investigate travel arrangements and home set up.

Day Five

- Progress exercises to standing:

  - Abduction
  - Flexion and extension of hip
  - Small knee bends
  - Passive stretch anterior hip joint

- Discuss with patient functional transfers. i.e. car transfers, bath transfers.

- Ascend and descend stairs with sticks.

- Discuss post discharge mobility plan and review precautions.

Day Six

- Ensure the patient has no further questions and is ready for discharge.

DISCHARGE CRITERIA

1. Medically stable
2. Healthy wound
3. Independent with transfers
4. Independent gait - four point cycle with two sticks
5. Independent stairs
6. Independent with exercises and understands post discharge plan and activity levels

GLOSSARY

SQC	-	Static quadriceps contractions
IRQ	-	Inner range quadriceps
MRQ	-	Mid range quadriceps
SGC	-	Static gluteal contractions

APPENDIX ONE

Patient education following Birmingham Hip Resurfacing

- The patient should use two sticks whilst mobilising outdoors and one stick in the house as confidence allows. Gradually reduce the reliance on the sticks so that one stick is used outdoors and none in the house. This should only be as confidence allows and the sticks can be discarded at about six weeks or at least prior to consultant review.
- The stairs must be ascended and descended one at a time. Ascending stairs should be with the non-operated leg first, whereas descending should be with the operated leg first. Reciprocal stair climbing can commence at six weeks if confidence and strength allow.
- Avoid long periods of standing as this may cause swelling to increase in the operated leg.
- Exercise and activity should be performed little and after.
- Swimming and cycling can be recommenced at the discretion of the consultant.
- Car transfers should always be to the front passenger seat with the as far back as manageable. The patient begins perpendicular to the seat standing either on the road or driveway - not kerbstone. The operated leg is held slightly forward and the patient lowers to the seat. The bottom is shifted back towards the centre of the car and then the legs are pivoted into the seat well. To exit the car, reverse the process.
- If a king journey is to be undertaken then frequent breaks are needed.
- The precautions should be followed for at least eight weeks where the risk of complications is greatest.