

# Information for patient/carer

## Multi - Level Surgery ('Gage' Procedure)



Alice Ward

## What is multi-level surgery?

Multi-level surgery is a series of procedures, bony, soft tissue or both, for correction of deformities of the lower limbs in children with Cerebral Palsy. The aim of the surgery is to help you walk with less effort by rearranging the muscles and bones in your hips and legs ( it is not a cure for cerebral palsy!) Surgery is often performed in two stages, the first being correction of the bones followed six to eight weeks later by soft tissue surgery (muscle and tendon releases). A programme of intensive physiotherapy follows this. Each stage can incorporate a number of procedures tailored to the needs of the individual and indeed, not everyone needs both stages. The medical staff will discuss the exact nature of the surgery that you require with you. The cooperation of both yourself and your family is imperative in achieving optimum success with this form of treatment due to the long-term compliance with physiotherapy and the wearing of splints. Your acceptance of this commitment must be assured before surgery is agreed.

## How long will I be in hospital?

The length of time you will be in hospital depends upon the nature of the surgery undertaken. If part of a two-stage procedure, you will be allowed home after the first stage once well enough and able to manage. Remember, if you are in plaster you will not be able to have a full bath or shower for this time.

You may not be allowed to put weight on the operated leg or legs which could mean you will need a wheelchair for this period, which you will need to arrange prior to admission as this hospital does not provide them. This can be done by contacting your GP surgery, local hospital or Red Cross organisation.

You will be readmitted to hospital six weeks following the initial surgery for the second stage if this is required. Following this if the muscles which bend the hips (psoas) have been released then it is necessary to lie flat for about five days and to commence a regime of lying on your tummy (prone) overnight and for an hour each afternoon. Plasters or splints may be on your legs to keep them straight.

Once all the surgery has been completed an intensive programme of physiotherapy will commence including hydrotherapy (exercises in the swimming pool). Depending on your progress you will remain in hospital for about six weeks or until a satisfactory level of mobility has been achieved. During this period you may be allowed home for the weekends after the first two weeks as progress allows.

### When will I be seen again?

After discharge you will be seen in clinic in about three months time to check on your progress. Your community physiotherapist will be contacted to help and encourage you with further progression of treatment as you continue to improve.

If metalwork such as pins, plates and/or screws have been used during surgery, these will probably need to be removed at some point during the future.

### What are the possible risks and complications?

Complications associated with this surgery may include:

- Scarring
- Infection
- Injury to blood vessels and/or nerves
- Failure to achieve complete correction
- Need for further surgery
- Failure of bones to heal
- Walking pattern not improved

You are encouraged to discuss these with the medical staff prior to surgery.

### Is there any alternative treatment?

As mentioned earlier the aim of this treatment is to improve your walking pattern. Physiotherapy and the wearing of corrective splints and footwear will also help and indeed is a necessary component of this technique but without surgery its effectiveness is limited.

Please be aware that the information within this leaflet is meant for general guidance only and that each case is treated individually so variations may occur.

Please follow any additional information given to you by a member of the health care team.

### Contact Numbers

Further information may be sought by contacting Alice Ward - **01691 404444**, or the aftercare department on **01691 404560**.

## If you require a special edition of this leaflet

This leaflet is available in large print. Arrangements can also be made on request for it to be explained in your preferred language. Please contact the Patient Advice and Liaison Service (PALS) email: [pals@rjah.nhs.uk](mailto:pals@rjah.nhs.uk)

Date of publication: November 2013

Date of review: November 2015

Author: Karen Roberts, Children's Unit

© RJAH Trust 2013

The Robert Jones and Agnes Hunt  
Orthopaedic Hospital NHS Foundation Trust,  
Oswestry, Shropshire SY10 7AG  
Tel: 01691 404000  
[www.rjah.nhs.uk](http://www.rjah.nhs.uk)