

## Bedfordshire and Hertfordshire Priorities Forum Statement

**Number:** 17  
**SUBJECT:** Lycra Dynamic Splinting for Children with Neurological Impairment  
**Date of decision:** December 2011  
**Date of review:** December 2013

### Guidance

#### Background

Over the last eight to ten years Lycra Dynamic Splinting has been one of the modalities of treatment available for children with Cerebral Palsy.

Lycra splints are made-to-measure and consist of sections of lycra stitched together using specific tension, direction of pull, type of material (e.g. water absorbent for under the arms) and thickness. Boning can be included to give extra support. Splints range from hand splints to full body garments. The closeness and tightness of the splint fitting increases proprioception and helps to increase spatial awareness. In turn, this aids the reduction of any excessive tone and relaxes the patient with possible improvements in posture and gait.

Dynamic lycra splinting is not suitable for clients who have fixed deformities of a bony nature which are not amenable to change. Compliance has a significant role to play in determining outcome, as it does for all therapy and medical interventions. The client and family or carers, who may be assisting them to apply the splints, are made fully aware of the commitment required to ensure success.

Lycra garments range in price depending on the type of garment used. These splints have a life of 12 months if they are maintained according to the manufacturer's instructions.

#### Evidence of effectiveness

Expert opinion suggests that younger children with athetoid disorders, those with quadriplegic palsy and those with neuromuscular disorders benefit the most. Requests for lycra splints are usually made by physiotherapists treating these children. Some children benefit in terms of avoiding hip dislocations, improving arm and respiratory function. There are, at present, very few children on long term use of these splints.

There are currently no NICE guidelines on the use of Lycra dynamic splinting. Very few studies have been published to assess the effectiveness and no studies have investigated the benefit of continuation in the long term. It is not very clear as to what extra benefit it provides to the patient as compared to the other treatment options. Also, it has not been fully evaluated, nor is it clear whether there are patient groups or specific disabilities that may significantly benefit more than others.

The overall clinical benefit is difficult to estimate at this time because published studies have very small patient groups and relatively short time frames. There is a clear need for more robust evidence on the long-term effectiveness. Also, a detailed cost - effectiveness study is needed before any cost savings can be quantified with regards to increased mobility and reduced care needs.

#### Recommendation

Requests for funding should only be considered on an individual patient basis by exceptional treatment panels. The referral needs to come from a local lead specialist physiotherapist or occupational therapist. The expected benefits for that patient over other treatments must be clearly quantified. Provision of subsequent garments will depend on clear demonstration of benefit for the individual patient.

**The Human Rights Act has been considered in the formation of this guidance statement.**