Introduction

At a very early stage in life, the arms are used together to help us balance, prevent us from falling, and to help us climb. However, if the muscles in one arm are tight or weak we may not be able to effectively use that arm to keep us safe when balance is compromised. Nor may we be able to engage in some of the routine activities requiring reaching with the arm i.e. putting clothes on such as coats, washing hair.

Many activities we perform in daily life also require the use of two hands. Some activities require one hand to act as a stabiliser whilst we use complex movements of the other hand to manipulate an object i.e. unscrewing a jar, cutting out, writing etc. Other tasks require both hands to engage in fine movements i.e. fastening buttons, lacing shoes etc. Children with restricted movement resulting from tight or weak muscles obviously find these two-handed activities difficult.

How Can Occupational Therapy help?
A few exercises a week will have limited effect and attending therapy sessions on a daily basis for many years would be very disruptive to family life. Therefore, in addition to showing children different ways of doing things, the way we help is to teach others how to help the child develop or maintain their muscle control and co-ordination through exercise, play and everyday activities.

Despite these problems children experiencing difficulties with their muscle control often learn very clever means of overcoming their problems such as fastening buttons with one hand etc. Occupational therapists can also give advice on different ways of doing what should be a two-handed task should the need arise i.e. shoe lacing, or we may be able to supply information on equipment which can be used to help compensate for limited skills in one hand.

The effects of therapy on upper limb development.
Therapeutic help never makes the stiffness or weakness fully disappear, but it can lessen the effects. When we first see a young child, we will endeavour to help develop the movement in the child’s limb and aim to obtain a hand which is useful to the child in everyday tasks.

Research shows that the sooner the child receives therapeutic help the more chance there is to:

- develop better movement,
- obtain more effective skills in their affected arm,
- prevent further tightness which occurs through limited use and the bad positions in which the arm is held.

We also know that whilst stretching exercises helps combat stiffness active attempts from the child to use these movements are essential if improvements in use are to occur.
Our first advice sheet section covers what therapeutic activities can be introduced into the home setting to help develop the child’s effective use of their tight limb.

See further advice and information sheets: Upper limb advice for hemiplegia Advice Sheets 1, and 2.

Jan Nicholson. Paediatric Occupational Therapist. Ronnie Mackeith Centre