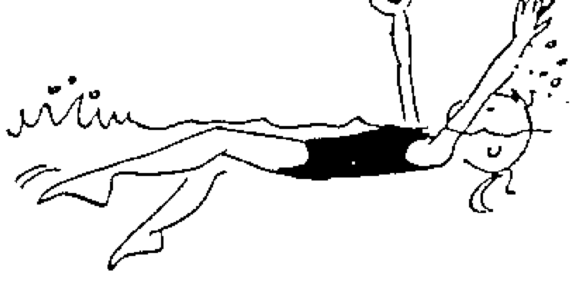
Spina Bifida Hydrocephalus
Queensland

SWIMMING FOR CHILDREN WITH SPINA BIFIDA



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May 05

DISCLAIMER

This booklet is designed to provide general information about the topics covered, to assist interested parties. It is compiled from information written by staff of the Association, as well as from various publications by authors not related to the Association. Accordingly, whilst the Association believes the information is the most accurate and up-to-date available, the Association accepts no responsibility for the information from other sources. There is still much to be learnt about spina bifida, hydrocephalus, and their causes and prevention. As further developments occur, the information may prove to be incorrect or incomplete. For this reason, and because the information is of a general nature, you should always obtain specific advice about matters affecting you.

COPYING

SWIMMING FOR CHILDREN WITH SPINA BIFIDA

Sport is important for several reasons. It provides

- fitness
- self-esteem
- social interaction
- fun

Swimming is one of the best exercises there are. For many children, it gives them the ability to move freely without aids or equipment for the first time in their lives.

Many children with spina bifida learn to become very competent swimmers, competing with non-disabled peers.

Children with spina bifida have different degrees of disability

For those children with good movement, learning to swim may be the same as for any other child, except for the problems of continence (See Appendix 2) and skin sensation.

For others of course, there will be many more problems associated with the paralysis such as the inability to kick.

INTRODUCTION TO SWIMMING

Ideally children will start to play in water and to learn to swim at a very young age.

Generally, the younger a child, the more easily he or she will become confident in the water.

- An early program should concentrate on water awareness and confidence in the water, just as for a non-disabled child.

  - getting used to the feel of the water
  - getting used to water on the face
  - splashing own face
  - running water over the head
  - blowing objects along the water
  - blowing bubbles in the water.

  These activities can be done in the bathtub as well as the pool, so children become used to them.

- Often the size of the pool is a cause for anxiety, so children need to get used to that as well:

  - work across a corner
  - have a floating toy for the child to focus on.

- Children with high lesions have no sensation in the lower trunk. Therefore to help them feel secure you must hold them where they can feel it, at least to begin with.

- Encourage independence - try not to allow a child to cling to you, but gradually move the child further away from you (but still held) or facing away from you.

HALLIWICK METHOD

The Halliwick method is a way of teaching people to swim. It is useful for disabled people because it teaches people of any size, shape, ability or disability to learn to manage their bodies in the water.

You generally need a group of children but with one-to-one help for each child. The Halliwick method uses lots of games to teach a variety of skills in the water.

Even though most children with spina bifida are in conventional swimming classes or having individual lessons, many of the Halliwick principles can still be applied.

- Mental adjustment - getting used to and feeling confident and happy in the water.

- Disengagement - gradually becoming more and more independent.

- Controlling rotation - learning to balance in the water, and assuming upright and face-up positions.

- Good breathing control is a must and should be in the background of all activities.

  - Tell the child, "If water comes near your face, or your face goes near water, then blow."
  - Teach the child to breathe out slowly when they go underwater.

- Things to discourage:

  - no gripping
  - no holding the breath
  - no shutting the eyes.
    THESE LEAD TO TENSION.

HEAD CONTROL

Head control is basic to controlling the body both on land and in the water, Therefore:

- The head should never be held, as this prevents the child from controlling his own balance in water.
- However, you can still have a hand gently under the head or the head resting on your shoulder.

HIGH FLOATING LEGS

Often the problem with a child with spina bifida is that the legs with little muscle bulk float very high in the water, continually putting the child off balance. If the child has a large head as well, this is even more marked.

SWIMMING STYLE

The swimming style that a child uses will obviously depend on how much he can move his legs, as well other factors. All available muscle groups should be used.

If a child cannot scissor kick, a dolphin kick, using the whole body may be suitable.

If learning freestyle is posing a problem, often the easiest way to learn to swim is to start with backstroke.

USE OF FLOTATION AIDS

Generally you should use aids as little as possible.

Most children can learn to swim without the use of aids, but often swimming will be achieved more quickly with the sensible use of aids. This allows more independence and confidence.

Remember that most of these kids need to use aids to move around on land all the time. It is much better if they can move around in the water without anything. If using aids, the child must always spend some time without aids, so as not to become dependent on them.

What sort of aids?

This depends on what problems the child is having. You can use home-made floats to go under whichever part of the body you wish. (Coolite and Tubigrip, Styrofoam bean bags) or small swim rings, neckfloats, bubbles etc. Commercial aids are available from Peppertown (Virginia, Brisbane) and many other stores.

GETTING INTO AND OUT OF THE POOL

The most common method is shown in Appendix 1. Encourage as much independence as possible.

The child should enter and exit over the side of the pool, not via a ramp or steps to teach him how to be independent in other pools.

FACTORS TO BE AWARE OF:

- Care of the skin
  Children with spina bifida generally have loss of skin sensation over the whole of the lower trunk and legs or part of the legs and feet only. Some children wear socks all the time in the pool to protect their feet. Special care needs to be taken when getting out of the pool. Make sure the pool side is not too rough. Can it be covered so that legs and feet are not scraped when getting out and turning?

- Shunt
  This is NOT a problem in swimming (except maybe scuba diving!)

- Stomas
  Some older children have a stoma or bag.

- Incontinence
  See appendix 2

ASSISTANCE

It is advisable to provide close supervision at all times. Individual assistance is often needed to help a child get into and out of the pool, even one who can move about independently in the water.

Independence in dressing and undressing is desirable. If possible, allow sufficient time for this. However, some assistance will often be required.

ELIZABETH STEELE
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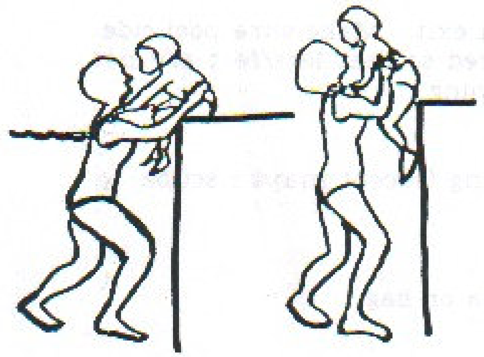
Appendix 1

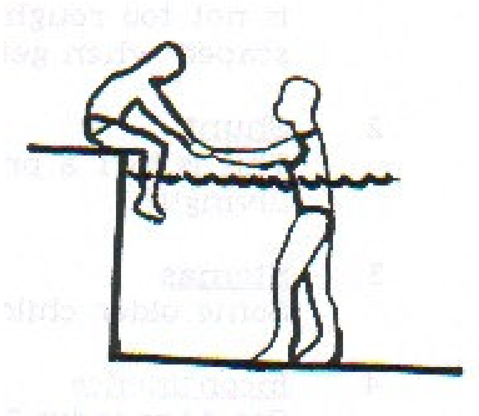
GETTING INTO THE POOL

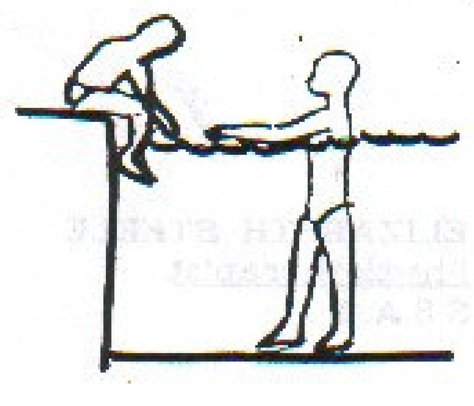
1. Assisted



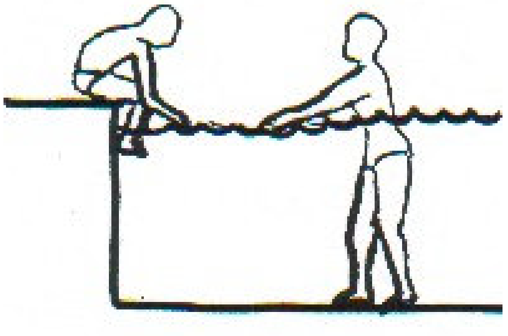
Helper in the water, well balanced, knees bent, one foot in front of the other. Arms around the Swimmer, palms on or just below the shoulder blades.

2. Hands on hands



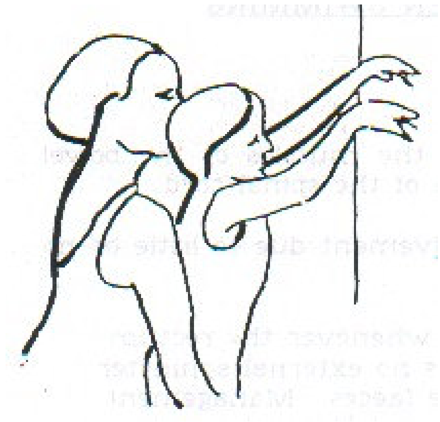


3. A gap between the child's hands and those of the helper.

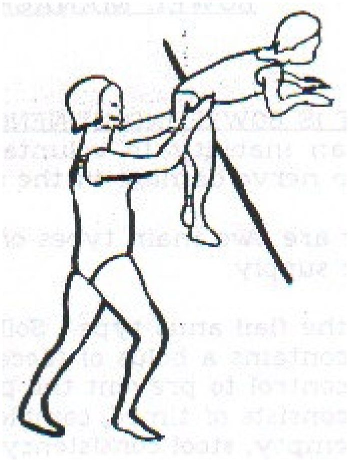


4. Independent entry falling forward

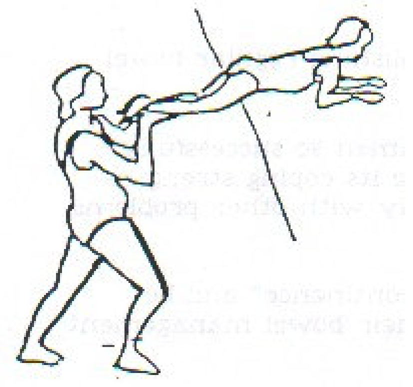
GETTING OUT OF THE POOL



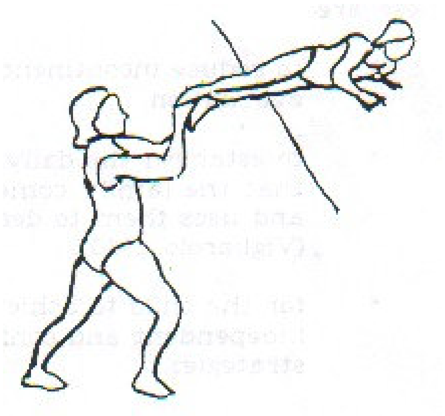
1. Child’s hands on the poolside.
Helper holds top of thighs.



2. The child pulls and the helper
assists to get the child’s
body on to the side of the pool.



3. The helper lifts the child’s
legs high as the child wriggles
forward.



4. The child rolls over and
and sits up – with assistance
if required.

APPENDIX 2

BOWEL MANAGEMENT WHEN SWIMMING

WHAT IS BOWEL INCONTINENCE?

It is an inability to voluntarily control the muscles of the bowel due to nerve damage in the sacral region of the spinal cord.

The nerve damage leads to two main types of bowel problems.

- the flail anus type. Soiling is likely whenever the rectum contains a bolus of faeces, as there is no external sphincter control to prevent the passing of the faeces. Management consists of timed, complete evacuations to keep the rectum empty, stool consistency maintenance, conditioning of rectal sensation and external sphincter voluntary contraction.

- the spastic sphincter type. When some anal sphincter tone is retained, faeces may not be able to pass out of the rectum. Retention and megarectum will develop if evacuation is not regular. Management consists of regular evacuation by relaxation of the sphincter.

OVERALL AIMS OF BOWEL MANAGEMENT PROGRAMMES

These are:

- to reduce incontinence by establishing regular bowel evacuation.

- to establish the daily bowel regimen so successfully that the family comes to realise its coping strengths and uses them to deal effectively with other problems (Vigliarolo, 1980),

- for the child to achieve social continence and be independent and confident in their bowel management strategies.

HOW DO WE MANAGE BOWEL CONTINENCE

Bowel management is an individual arrangement made between the child's paediatrician, the family and the child.

The management is often ongoing throughout the child's life. It may vary from time to time for a variety of reasons and may involve a combination of strategies.

SOME MANAGEMENT STRATEGIES:

- Toilet training time
- Diet
- Enemas, eg. bowel washout, Microlax, MACE
- Medication
    - to add bulk to faeces
    - to stimulate the bowel
    - to slow down the bowel.
- Manual evacuations.

WHAT NEEDS TO BE CONSIDERED BEFORE SWIMMING STARTS?

- Is there likely to be an accident in the pool?
  It is wrong to assume that because a child has spina bifida or because a child is bowel incontinent, that they will have an accident in the pool.

  However it is very important to ask the family and let them know when swimming is going to start so that they can plan and prepare their child for an accident free day in the pool.

- The child's compliance.

- Ask the child if they want to participate in the swimming programme and if they are agreeable with the bowel management strategy used in this activity. This is particularly important for children who may have to use other temporary management strategies if they are unable to remain accident free in the pool.

ALTERNATIVE TEMPORARY MANAGEMENT STRATEGIES FOR SWIMMING

1. Taping or strapping the buttocks together.
   This is a last resort solution for a child who wants to go swimming and who is unable to remain accident free during the short time he or she is in the pool. It is also a decision that is made only by the parent and the child: and can only be done with both parties consent.

   It is also important to note that taping is a specific technique and parents need to seek information as to how it is performed, from their own hospital. Taping is not for all children who may be bowel incontinent. Taping or strapping of a child who has had success in their bowel management and who has achieved social continence and can remain accident free in the pool, can be extremely damaging to their self esteem, confidence and sense of control of their own bowel management.

2. Anal Plugs
   This is a plug that has been specifically designed for people with spina bifida. It is inserted into the rectum by the person or parent prior to swimming. It can be in situ for a number of hours.

   For a sample or more information contact Coloplan on 1800 673 317.

3. Swim Diapers
   A number of different types of swim diapers are available, but are mainly for small children e.g. Kooshies - from baby stores and Swim Diaper- from Peppertown - (07) 32655666.

OTHER CONSIDERATIONS

1. Who is going to be responsible before and after swimming?

2. The possibility of irritation and abrasion to the skin from taping.

3. The child's privacy and dignity.

4. The child can say, “No” to swimming.

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SBH Queensland

APPENDIX 3

REFERENCES

"Hydrotherapy In Paediatrics, "Margaret Reid Campion,
William Heinemann Medical Books, London, 1985

"Hydrotherapy Assessment for Teaching the Disabled to Swim" Julie Harrison, available from Australian Hydrotherapy Services, P.O. Box 500, Indooroopilly, Q. 4068 Phone: (07) 3378 9987

HYDROTHERAPY EQUIPMENT

Available from:

Peppertown,
1908 Sandgate Road
Virginia, Qld. 4014
Phone: (07) 3865 3488

FURTHER ASSISTANCE

If you wish to learn more about teaching someone with a disability to swim, there are,

i CAD courses (Coaching Athletes with Disabilities) available.
ii Other resources for coaches.
iii Information on suitable swimming coaches in different areas.

For more information, contact:

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