



**GUIDELINES FOR THE USE OF HYDROTHERAPY/AQUATIC
THERAPY FOR PATIENTS WITH JUVENILE IDIOPATHIC
ARTHRITIS**

These guidelines have been compiled by the Allied Health Professionals Group of the British Society for Paediatric and Adolescent Rheumatology (BSPAR).

Introduction

These guidelines are designed to help and support paediatric therapists working with children and young people with Juvenile Idiopathic Arthritis (JIA). They provide guidance on the hydrotherapy/aquatic therapy management of such children and young people to ensure optimum evidence-based management for all patients irrespective of geographical location. These guidelines should be read in conjunction with A Standard Assessment for Juvenile Idiopathic Arthritis (BSPAR 2003), Allied Health Professional Standards of Care for Juvenile Idiopathic Arthritis (BSPAR 2007), Guidelines for the Therapy Management of Children and Young People with Juvenile Idiopathic Arthritis (BSPAR, 2010) and the BSPAR Position Statement on Professionals Working in Paediatric Rheumatology Teams (2007) as well as related medical and nursing documents.

Hydrotherapy is also known as Aquatic therapy so both terms have been used throughout this document

These standards will be reviewed in 2014.

What is Hydrotherapy/Aquatic Therapy?

“Hydrotherapy (aquatic therapy) is a therapy programme utilising the properties of water, designed by a suitably qualified Physiotherapist specifically for an individual to improve function, carried out by appropriately trained personnel, ideally in a purpose built, and suitably heated hydrotherapy (aquatic therapy) pool (HACP, 2006).”

Indications for the use of hydrotherapy/aquatic therapy in the management of Juvenile Idiopathic Arthritis (JIA)

Hydrotherapy/aquatic therapy has been commonly used in the management of JIA for many years (Hackett et al, 1996), but is a possibly used less at present due to improvements in medical treatments and financial constraint resulting in reduced availability of hydrotherapy/aquatic therapy pools. Further, there is little conclusive evidence to support hydrotherapy/aquatic therapy either in conjunction with or in preference to other forms of physical rehabilitation (Epps et al, 2005).

However, hydrotherapy/aquatic therapy has been reported as the treatment of choice by physiotherapists, parents and children in preference to land-based therapy alone (Scott, 2000 and Epps, 2005). It is perceived as an enjoyable mode of therapy and adherence is good. Furthermore, there is no evidence of exacerbated disease activity during intervention, indicating that hydrotherapy/aquatic therapy treatment is safe and for patients with unremitting active disease, hydrotherapy/aquatic therapy may be an essential part of management (Epps, 2005).

Following a specific and detailed therapy assessment, hydrotherapy/aquatic therapy may be considered a valuable component of the management programme for an individual patient. This should be reviewed regularly.

The physical properties of water are used to reduce the effects of gravity and provide assistance, support and resistance for exercises. (Harrison & Bulstrode 1986, Reid-Campion, 1998).

Why is hydrotherapy/aquatic therapy beneficial for patients with JIA?

Children and young people with JIA may develop the following problems, which can be addressed by the use of hydrotherapy/aquatic therapy:

Pain. The temperature of water in a hydrotherapy pool (34 – 35.5 degrees Celsius) helps to reduce pain and aid relaxation. (Franchimont et al, 1983, O'Hare et al, 1985, Weston et al, 1987, Linneker et al, 2000 and Templeton et al 1996)

Decreased range of joint movement. Mobilising exercises in a heated pool will improve range of movement due to reduction in pain and weight bearing. (Bacon et al, 1991)

Decreased muscle power. Water may be used as optimal resistance to increase muscle power. (Oberg et al, 1994 and Epps, 2005)

Reduced weight bearing and adapted gait patterns. Gait re-education will be facilitated by the support of the water (Harrison et al, 1992).

Reduced cardiovascular fitness (Bacon et al, 1991) Reduced loading on lower limb joints during immersion in water may enable strenuous activity during hydrotherapy which is not possible on land (Harrison & Bulstrode, 1986 and Harrison et al, 1992)

Impaired function and independence. Hydrotherapy/aquatic therapy may help improve function and independence (Hall et al, 1996)

Reduced quality of life and social interaction (Takken, 2001 and Hall et al, 1996). Water may be the only medium where some patients feel on an equal footing with their peers (Reid-Campion, 1998)

Physiotherapy Standards

Physiotherapists must work within the Rules of Professional Conduct (CSP, 2002), the Core Standards of Physiotherapy Practice (CSP, 2005) and the Service Standards of physiotherapy practice (CSP, 2005).

Physiotherapy Competency

Rule 1 of the Rules of Professional Conduct (CSP) states that “chartered physiotherapists shall only practice to the extent that they have established, maintained and developed their ability to work safely and competently and shall ensure that they have appropriate professional liability cover for that practice”.

The hydrotherapy/aquatic therapy management of a patient with JIA should be carried out by a therapist competent in the management of paediatric rheumatological conditions and hydrotherapy/aquatic therapy. A Foundation or Level 1 course in hydrotherapy/aquatic therapy or its equivalent is recommended (HACP 2006).

Hydrotherapy/Aquatic therapy Pool

A hydrotherapy/aquatic therapy pool requires a policy to ensure both its smooth running and to maintain legally required Health and Safety standards

(HACP, 2005 and CSP 2001). CSP Service Standards 17 & 18 relate to the Management of a Hydrotherapy/aquatic therapy Pool (CSP, 2005). The use of pools in schools and other settings is governed by their local policies.

Hydrotherapy/Aquatic therapy Management Approaches

All patients should have an individual detailed assessment by a physiotherapist, taking into account contraindications to hydrotherapy/aquatic therapy (HACP, 2006 and APA, 2002) and any other special needs. The hydrotherapy management of patients with JIA may take a variety of forms:

- **1:1 treatment:** with an individual programme for each patient
- **Group sessions:** a number of other similar patients each benefiting from the same exercise programme and the group experience.
- **Advice on self-management:** may include a programme for a patient to carry out in a local pool independently or recommendation to attend a self-help group.

Abbreviations

APA	Australian Physiotherapy Association
CSP	Chartered Society of Physiotherapy
HACP	Hydrotherapy Association of Chartered Physiotherapists
JIA	Juvenile Idiopathic Arthritis

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