Studies performed with the Headpod

This documents show the studies that we know about that have studied the use of Heapdod in patients. We will update this documents if there are new ones published.

Title: Effects of a new dynamic head suspension device in feeding people with loss of head control

Date and place:01/01/2013 at Centro Ramón y Cajal. ASPACE Navarra, Spain

Document type: estudy

Authors: Mónica Arroyo Noriega OT, Lourdes Lopetegui Jaunsaras MD

Abstract: Presenting the results of a research on the posture of five multi-disability subjects that were studied during feeding time. All of them had bad head control, comparing the basal position with the one obtained using the new head support device called Headpod ®. The results show the benefits that this new therapeutic tool can provide to both the users and caretakers. People with cerebral palsy, and also those presenting other types of disabilities, have quite often postural control problems making difficult swallowing and feeding. For this reason the adequate position and head and neck alignment has been accepted as the objective in the treatment of oral-motor disfunctions. According to Ogg (1975), the most important motor function related with feeding is the control of the head and neck.
To achieve this objective, they have been using devices that block the head movement adapted to chairs, associated with the reclining of these chairs.

Link: https://drive.google.com/open?id=0BxvhYzvMVTTWTmN1ZkZZVGRKRUk

Title: Headpod: Use of an innovative dynamic suspension system in a case of spastic tetraparesia with axia hypotonia.

Date and place:10/09/2013 at Neural, Instituto de neuro-rehabilitación, Valencia, Spain

Document type: Poster of a case study

Authors: Martínez B, Téllez de Meneses Mª, Gutierrez Mª Huerta P. Cruz S. Valderrama J.

Abstract: Head control is being able to maintain the head upright in relation to gravity, establishing an axis between the body and the same. All levels, motor, sensitive, cognitive, social and communication are affected. Kids with cerebral palsy level V of the Gross Motor Function Classification System present this alteration of capacity. The device we are presenting provides what others more commonly known do not, a dynamic control

Link (Spanish): https://drive.google.com/open?id=0BxvhYzvMVTTWeGdTR1ZQMGtnNk0

Title: Posture and manual function with PC kids with the use of a Head Suspension device. Crossover trials.

Date and place:22/06/15 at Universidad de Alcalá, Madrid, Spain

Document type: End of degree in Physiotherapy Project.

Author: Irene Ferro Galardi

Abstract: Cerebral Palsy in children is the first cause of disability in childhood and teens. The main shortfall is postural control and a 42% needs intervention for an adapted seating. The main target of postural control is to stabilize the head in space, in order to receive correct visual and vestibular information. Nonetheless some kids with grades IV and V in the Gross Motor Function Classification System have a lack of head control that provokes the posture of "head drop", that has negative effects in the structure and function, activity and participation of the kid. A stable head is key for a successful activity. Head stabilization devices can help manual function and it is important not to be static or block the heads movement. The Headpod device limits the drop of the head allowing a complete rotation. Objectives: observe the differences in postural alienation and manual function in kids with Cerebral Palsy and loss of head control in two interventions of adapted seating, with and without Headpod.

Link (Spanish): https://drive.google.com/open?id=0BxvhYzvMVTTWa1JrdGk1VzJpVmc

Title: Effectiveness of the Headpod device during feeding in kids with disfagia due to neuromotor pathology: an open clinical trial.

Date and place:06/11/2015 at CPEE «Ángel Rivière», Zaragoza, Spain

Document type: Case study

Authors: Martínez B, Téllez de Meneses Mª, Gutierrez Mª Huerta P. Cruz S. Valderrama J.

Abstract: Background and objective: To test the effect of «Headpod,» the new device with dynamic suspension for the head in children with feeding problems.
Case report: An analysis was made of a series of cases in which children with dysphagia due to some cephalic control deficit were recruited.
Intervention: Every subject wore the device. The comparison was made by each subject of the results between wearing the device and not wearing it. A questionnaire that evaluated the following items was used: posture of the head and neck, posture of the trunk, drooling, frequency of choking, closing of the mouth, active swallowing, attitude of the child and ease of the adult in the act of feeding.

Results: None of the evaluations indicated worse results in any of the subjects and there was a majority of evaluations of superior to «equal» in all the items. The two items with the best results were head and the neck posture and active swallowing.
Discussion: This new tool benefits both the users and the staff in charge of feeding the child. However, more research is needed on this matter because of the limited number of subjects analyzed.

Link (Spanish): http://www.elsevier.es/es-revista-fisioterapia-146-pdf-90387527-S300

Title: Issue of maintaining the head upright in kids with polidisability with general hypotonia: proposition of different devices starting from a clinical case.

Date and place: 21/11/2015 at the Service des pathologies neurologiques congénitales, INRC, hôpital de Saint-Maurice, Saint-Maurice, France.

Document type: Case Study.

Authors: I. Goffard, H. Lebrault

Abstract : General hypotonia in children with multiple physical disabilities leads to difficulties in postural head control, of which risks are orthopaedic and functional (food ingestion in the bronchial system, respiratory disorders, etc.). Based on clinical observation we will reflect on the features and indication of the equipment to best reduce cervical hypotonia. By means of a clinical case, we will describe several methods of postural head control with their respective benefits and drawbacks, in order to improve the function: dynamic headrest, partial head hanging, helicoidal headrest and chin strap.

Link (French) : http://www.sciencedirect.com/science/article/pii/S0245591915000783

Title: Assessment of the use of Headpod in kids without head control.

Date and place:10/01/16 at the Universidad de Salamanca, Spain.

Document type: End of degree in Physiotherapy Project.

Author: Eva Galarrón Pérez

Abstract: Head stabilization devices can help achieve a correct posture in subjects with Child Cerebral Palsy, but it is important that they are not static nor block the possibility of movement. The Headpod device limits the drop of the head while allowing a complete rotation. The main target of this project is to objectively obtain and analyze data of the rotation of the head and show evidence in a simple way the improvement in position and function in the patient with the use of the Headpod. The main study was performed with seven kids with ages between 4 and 15 years old, all of them pupils of the CEE Miguel

Hernández with whom I work or have worked, with loss of head control due to axial hypotonia or dystonia. Previously a study was performed on five non handicapped volunteers using a cervical goniometer, in order to elaborate a equivalency chart from centimeters to degrees that would be useful for the posterior assessment and study. The Headpod device improves in a obvious way the patient functions, as well as their relation with others, because it allows a correct posture of the head facilitating voluntary rotation movements.

Link (Spanish): https://drive.google.com/open?id=0BxvhYzvMVTTWTi1ibmhKMnJsMEk