What can the physiotherapist do for the child in palliative care?

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Abstract

The World Health Organization defines Palliative Care as “an approach that improves the quality of life of patients (adults and children) and their families facing problems associated with life-threatening diseases”. The physiotherapist in palliative care aims to improve the quality of life and social life through behaviors that functionally rehabilitate the patient, as well as assisting the caregiver to cope with the rapid advance of the disease.

Keywords:
child, palliative care, physical therapists, quality of life.
INTRODUCTION

Technological advances in pediatrics have brought great advances in all specialties, such as in neonatology, where low birth weight newborns have increasing survival rates, and in oncology where new therapeutic managements appear, enabling mortality reduction in children with cancer.¹

However, researchers are reporting a growing prevalence of chronic, degenerative and oncological diseases among children worldwide.² Such processes in children with complex or incurable diseases, life-threatening or limiting conditions, require frequent hospitalizations, consultations and examinations are a major challenge for healthcare authorities in many countries.³,⁴

The World Health Organization (WHO) defines Palliative Care (PC) as “an approach that improves the quality of life of patients (adults and children) and their families when facing problems associated with life-threatening diseases. It helps prevent and relieve suffering through early identification, correct assessment and treatment of pain and other problems, whether physical, psychosocial or spiritual.”⁵

PC apply to six conditions: children in whom curative treatment is possible but may fail; children in need of long-term intensive care; children for whom there is no hope of improvement, with the goal of treatment being fully palliative and likely to last for years; children with severe neurological damage, leading to greater vulnerability and complications; newborns with limited life expectancy and relatives of children who suffered trauma, sudden death of the baby or early newborn death.⁶

PC is not limited to specialized units, but can be held in a variety of locations, including inpatient wards, clinics, and home care. The physical therapist takes care of the child during all treatment stages, and it may work from the hospital to the child’s home, depending on patient’s needs and clinical conditions. Thus, children avoid isolation and parents can maintain their lifestyle and are usually recognized as part of the palliative care team.⁷,⁸

Studies show that physical therapy in PC aims at improving the quality of life and social life through rehabilitating patient behavior, as well as helping the caregiver to cope with the rapid progress of the disease, and it is effective in addressing many associated symptoms, including cancer-related fatigue, pain, poor appetite, depression, dyspnea, and pulmonary hypersecretion.⁹,¹⁰,¹¹,¹²

Children get bored easily, for the physical therapist to reach his goals, a playful treatment is required. Physical therapy procedures should be adapted to patient’s age group and mainly aim to delay clinical evolution and prevent secondary complications.¹³

PAIN

Pain is one of the most common symptoms experienced by children receiving PC.¹⁴ It occurs in individuals who experience a series of physical, psychological, social and spiritual discomfort, such as skin lesions, unpleasant odors, anorexia, insomnia, fatigue, grief, depression, among others, and should be controlled because it generates disability in individuals, regardless of the underlying disease.¹⁵,¹⁶

Using manual resources, physical and orthotic means minimize the symptomatic perception of pain. Among the physical therapy modalities, we can add:

- Kinesiotherapy: movements are used as a means of treatment, based on movements that provide mobility, muscle flexibility, coordination, increased muscle strength and resistance to fatigue.
- Electrotherapy: consists of the use of electric current through electrodes that are applied directly to the skin for therapeutic purposes promoting analgesia, resulting in activation of the pain suppressing system and producing a sensation that interferes with its perception.
- Thermotherapy: this treatment modality enables vasodilation, muscle relaxation, improved metabolism and local circulation, extensibility of soft tissues, alteration of tissue viscoelastic properties and inflammation reduction. It is noteworthy that superficial heat thermotherapy is contraindicated when applied directly to tumor areas.
- Massage Therapy: Consists of a series of massage techniques, which can induce a relaxation response, increased blood and lymphatic circulation, potentiates analgesic effects, increases endogenous endorphin release, and competing sensory stimuli that replace pain signals. Studies suggest that massage has been shown to have beneficial effects on pain and mood among patients with advanced cancer.

Such resources may be used in association with acupuncture, relaxation and breathing techniques.¹⁷,¹⁸,¹⁹

FUNCTIONAL MOBILITY

Functional decline is common in patients dealing with advanced or end-stage systemic diseases. Identifying the cause of functional decline is useful in determining the functional recovery prognosis.²⁰

However, family members, caregivers and even healthcare professionals unnecessarily restrict many patients in PC when they are still able to perform their activities and have independence. The reinsertion of the patient in their activities of daily living restores the will to live and dignity.²¹,²²

ADAPTATIONS

Adaptations, the use of orthoses and walking aids are often indicated to favor the patient’s greater functionality,
autonomy and decrease pain perception. These types of devices can be used permanently or not, because their use aims to align, prevent and/or correct possible deformities, enabling the patient greater functionality of the limb and the preservation of one’s mobility and autonomy.12,23

**RESPIRATORY COMPLICATIONS**

Bedridden patients have pulmonary secretion buildup due to decreased mucociliary transport movement and weakened cough.24

Pulmonary changes such as dyspnea, atelectasis, accumulation of secretions and other ventilatory symptoms or complications can be prevented, treated or alleviated by respiratory physiotherapy, i.e. ventilatory patterns and diaphragmatic awareness, unobstructive airway maneuvers, reexpansion maneuvers, postural orientation, relaxation techniques, oxygen therapy, noninvasive positive pressure ventilation.25

Noninvasive positive pressure ventilation can be used in patients with ventilatory failure under three situations: as a life support that does not limit other healing approaches; life support when patients and family members decide not to undergo endotracheal intubation; as a palliative measure when patients and family members decide to avoid all life support, receiving only comfort measures.26

**FINAL CONSIDERATIONS**

Currently little is known about experiences, beliefs, and knowledge on PC among physical therapists in Brazil, especially when it comes to pediatric palliative care (PPC). Although PPC policies and services have been developed, research in this area remains behind schedule.

Due to the potential benefit of adding physical therapy to PC, it is necessary to involve physical therapists in the discussion of topics associated with humanization, death, PC and the need for further investigations/studies in the field of pediatrics, to optimize their performance in the processes and thus corroborate with the multiprofessional and integrated treatment needed for the care of these children.

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