Secondary Lymphedema to Breast Cancer Treatment: Physiotherapeutic Approach in Times of Pandemic

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Linfedema Secundário ao Tratamento do Câncer de Mama: Abordagem Fisioterapêutica em Tempos de Pandemia

Linfedema Secundario al Tratamiento del Cáncer de Mama: Enfoque Fisioterapéutico en Tiempos de Pandemia

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INTRODUCTION

Since the beginning of the pandemic caused by the novel coronavirus (2019-nCoV), responsible for the severe acute respiratory syndrome coronavirus 2 – Sars-CoV-2, many changes occurred in providing health services all over the world either for the institution or maintenance of the treatment of several health conditions, including oncologic treatments[1].

Current studies confirmed that oncologic patients have worse prognosis when infected by Sars-CoV-2, presenting more likelihood of criticality, support of invasive ventilation and death[2,3].

Breast cancer is the most incident neoplasm among females[4] and lymphedema is one of the main complications of the oncologic treatment and evolution of the disease[5]. The physiotherapeutic approach is the standard treatment of lymphedema whose objective is the reduction and maintenance of the volume of the limb affected and to avoid some complications as erysipelas, cellulitis, lymphangitis and lymphangiosarcoma[6,7].

However, because of the necessary social distancing in this moment of tackling the crisis provoked by the coronavirus disease 2019 – COVID-19 the care to these patients needs to be modified in order to prevent the propagation of this infection. New modalities of consultation (teleconsultation, telemonitoring and teleconsulting) were authorized to make possible the physiotherapeutic follow up during this period[8].

In this context, it is important to approach the care and guidance to the professionals, patients and relatives in relation to prevention, beginning and maintenance of the treatment of lymphedema. Several recommendations were gathered in this document with the purpose of clarifying the physiotherapists about the options of consultation and follow up of patients with secondary lymphedema to breast cancer.

RECOMMENDATIONS

During the pandemic, it is advisable to suspend the in-person consultations of the patients who do not present imminent risk conditions of clinical worsening. The physiotherapist is responsible, through its professional autonomy, to evaluate constantly the patient health status and decide the best physiotherapeutic conduct and follow up[9]. If in-person consultation is chosen, always consider the risk of exposure to the virus and follow all biosafety norms recommended for personal and the patient protection[10,11].

The secondary lymphedema to cancer treatment is a chronic condition with several clinical manifestations and can cause alterations in the limb affected, functional, esthetic and psychosocial repercussions[12,13]. Whether lymphedema is stable or not, it is possible that, when the patient, its relatives and/or companions are provided guidance through tele-consultation/tele-monitoring, this condition manages to be controlled during this period of crisis.

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The in-person consultation can be resumed in the cases where the decompensation of the volume of the limb provokes important clinical repercussions that affect the quality of life of the patient as discomfort, pain, reduction of the mobility or risk of infection. In addition, the consultation of cases that can evolve with complications needing hospital care should be prioritized.

The physiotherapist can evaluate the individual necessity of each patient and must follow the recommendations according to the Technical Note issued by the Brazilian Association of Physiotherapy in Oncology (ABFO) about physiotherapy care in oncology in case of outpatient, home and hospital consultations during the COVID-19 pandemic[14].

The decision about the type of care to be realized as well as the conduct adopted must be entered in the patient's chart in order to minimize ethical problems and further inspections.

Should any patient seek for care after the treatment of breast cancer and does not have lymphedema, preventive guidances can be provided by tele-consultation and tele-monitoring during the pandemic[8]. The same can be done when the patient presents the first signs of a possible lymphedema or infection in the limb[6,14-17]. Below, are the recommendations to the physiotherapists caring for patients with risk of developing lymphedema or with secondary lymphedema to the breast cancer treatment.

Prevention of the lymphedema

The physiotherapist should initiate the prevention of lymphedema as early as possible through guidances about the care to the upper limb as skin moisturizing and others in general to prevent infections, the best form of performing the daily activities (household, work and leisure) to avoid overload or discomfort of the limb, advise home exercises with upper limbs to improve the lymphatic angiomotricity, the tonus of the lymphangion and promote the recruitment of the collateral lymphatic routes. In addition, health habits of life (food, physical activities, control of body weight) must always be encouraged.

Diagnosis of the lymphedema

- The physiotherapist must provide guidance about initial signs and symptoms of lymphedema in the upper limb as feeling of weight in the limb, tugging and swollen arm.
- The physiotherapist must provide guidance about signs of infectious processes in the upper limb and, in case these symptoms appear, the patient should seek specialized care.
- The physiotherapist must always value reports of feeling of weight/swelling, pain and phlogistic signs in the homolateral member of the treatment for early diagnosis of the lymphedema. A relative or the patient itself can be guided about the physical exam, evaluating the conditions of the skin and perimetry of the limb.

Treatment of the lymphedema

In case some patient seeks the physiotherapist because of lymphedema, the recommendations can be given by tele-consultation and tele-monitoring[8], always considering the grade and characteristics of the lymphedema.

- If the patient does not present alteration of the perimetry, but reports subjective symptoms of lymphedema (feeling of weight in the limb and/or swelling or presents lymphedema grade I, with sign of pitting, reducing at rest) follow the guidance: lymphatic self-massage, skin care, intensification of home exercises and reduction of the overload caused by daily activities. These patients must be revaluated by tele-monitoring when the physiotherapist deems necessary. If the symptoms persist, it can be recommended the use of a compressive bandage or in-person consultation, if needed.
- Difference of 2.0 cm between the limbs in up to two spots presented for the first time without lymphostatic fibrosis and with sign of pitting: advise to perform lymphatic massage, intensification of lymphokinetic exercises, skin care and with the activities of daily life and evaluate the necessity of adapting compression bandage during activities with effort.
- Difference between the limbs of 2.5 and 3.0 cm in one or more spots presented for the first time without lymphostatic fibrosis: advise to perform adaptation of compression bandage (continuous use – remove only for limb hygiene and night sleep).
- Alteration of the perimetry between 2.0 and 3.0 cm presented for the first time and with lymphostatic fibrosis; difference bigger than 3.0 cm in one or more spots; or refractory lymphedema to the use of compression bandage: advise the relative/companion to apply compressive bandage or the patient itself does self-bandaging. The technique can be learned by video or during an in-person consultation in compliance with ABFO[14] orientations. After maximum reduction of the lymphedema, guide the use of a compression bandage for adaptation. In this phase of reduction of the volume of the upper limb and after adaptation with the bandage, tele-monitoring must be used at the periodicity the physiotherapist deems necessary for better monitoring of the patient.

- Lymphedema by tumor obstruction: advise self-bandaging or compression bandage performed by a relative/companion since there is no tumor thrombus or invasive diffuse carcinomatosis. The possibility of adaptation of compression bandage or maintenance of compression bandage must be evaluated according to the individual characteristics of the patients with the evolution of the palliative treatment or of the disease.
- Patients using compression bandages with stabilized lymphedema must be revaluated when the physiotherapist deems necessary or if the patient observes decompensations/increase of the volume of the limb. Every patient must be guided to perform daily exercises at home with external compression in the limb with lymphedema and avoid overload during the execution of daily activities and hygiene care, skin moisturizing and lymphatic self-massage. In this case, it is advisable to use disposable gloves when applying bandaging or compression bandage to perform the activities and reduction of the risk of contact and contamination by the virus.

CONCLUSION

Patients with secondary lymphedema to breast cancer treatment must be followed up by the physiotherapist for better control of this condition. During this pandemic, the physiotherapist role is to guide the relatives, companions and patients through tele-consultation and tele-monitoring about care, recommendations and treatment available, reducing the risk of contamination by Sars-CoV-2 and overseeing the integrity of the patients. If there is an actual necessity of in-person consultation, the physiotherapist must follow all the recommended biosafety norms for personal and the patient protection.

CONTRIBUTIONS

All the authors contributed substantially for the conception and design of the study, gathering, analysis and interpretation of the data, wording and critical review and approved the final version to be published.

DECLARATION OF CONFLICT OF INTERESTS

There is no conflict of interests to declare.

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