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MANAGEMENT OF BREAST CANCER IN ECUADOR DURING THE COVID-19 PANDEMIC

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ABSTRACT

Breast cancer is the most common among women worldwide, accounting for 16% of all female cancers. Due to the new modality, in Ecuador, public health services have been restricted or are being carried out through telemedicine, which greatly affects patients suffering from cancer. The objective of this article is to establish the management of breast cancer during the COVID-19 pandemic, by reviewing the scientific literature from the last 4 years. For this research, the analytical - synthetic method was used and data collection techniques is the bibliographic - documentary. The search and review of scientific articles in indexed journals, published in the last 4 years, was carried out. Before making a decision about the management of the person with Ca, the risks of starting or continuing treatment against Ca should be discussed with him, taking into account that the therapies are most of the time systemic, increasing the risk of have further complications if you become infected with the coronavirus. In conclusion, for adequate management of women suffering from breast cancer, it is necessary to comply with the general recommendations for cancer patients, having the main concern in determining the risk benefit of the treatment, taking into account the patient's opinion about it, prior discussion on the subject with the patient. As a relevant point, the risk of contagion of Covid-19 must be minimized, complying with the protocols and reducing the visit time to the Health Center as much as possibleKey words: Breast cancer, management, treatment, covid-19, women.

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1. INTRODUCTION

Breast cancer (BC) is defined as the malignant proliferation of epithelial cells lining the mammary ducts or lobules, with the ability to spread to any part of the body. This disease, of multifactorial nature, involves genetic and environmental factors as contributing elements (1)(2).

Among the associated risk factors are a body mass index (BMI) exceeding 40, early menarche (before 12 years old), a history of respiratory-tumoral conditions, nulliparity or insufficient parity, first pregnancy after the age of 35, lack of or brief breastfeeding, use of estrogen for more than 5 years, and a family history of breast cancer or other types such as ovarian and uterine cancers (2).
The most common clinical findings in BC are characterized by the presence of a lump or thickening in the breast, alterations in size, shape, and appearance of the breast, recent nipple inversion, redness in that area, and the presence of axillary lymphadenopathy. The diagnosis of this pathology is carried out through a comprehensive clinical evaluation and imaging studies such as mammography, breast ultrasound, and magnetic resonance imaging, complemented by specific tests for tumor markers and biopsies (3).

While consultations for breast pathology are frequent among women, the majority of cases are benign (4). However, breast cancer is the most prevalent among women globally, representing 16% of all female cancers. In 2008, 1.38 million new cases were diagnosed, with 60% of deaths occurring in developing countries (5)(6).

In Ecuador, according to the 2018 Globocan statistics, there were 28,058 new cancer cases, averaging 165 cases of cancer of all types per 100,000 women. Breast cancer was the most common, with 2,787 cases (18.2%) (7). This disease ranks third as a cause of cancer-related deaths in the country, following prostate and stomach cancers. The survival rate for breast cancer during the period 2010-2014 was 75% (8).

Early-stage, non-metastatic breast cancer is potentially curable. After diagnosis, management should be determined by a multidisciplinary team, considering subtypes such as

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triple-negative or HER2, for which primary systemic therapy may be the most suitable option (9).

An analysis of 928 individuals with cancer and COVID-19 revealed that having active and progressive cancer is associated with a 5 times higher risk of mortality within the first 30 days compared to patients in remission (5). Given the new mode of public health services in Ecuador, often conducted through telemedicine, breast cancer patients, considered vulnerable due to compromised immunity, must take into account specific measures during the pandemic, evaluating the risk-benefit and safety of treatments (10).

Amid the COVID-19 pandemic, oncologists must weigh the risks of the SARS-CoV-2 virus to prioritize the administration of cancer therapies, considering therapeutic intent, patient conditions, and the availability of healthcare personnel (11).

2. OBJETIVE

Elucidate the management of breast cancer during the COVID-19 pandemic through a review of scientific literature, for a better understanding of the topic and improve the care of patients with this pathology.

3. METHODOLOGY

The method used in this study is the analytical-synthetic approach, and the data collection techniques are bibliographic-documentary. The search and review of scientific articles in indexed journals on the management of breast cancer during the Covid-19 pandemic were conducted over the last 4 years, utilizing databases obtained from electronic search engines such as PubMed. The search, conducted in English, used keywords "breast cancer" and "COVID-19" during the months of August to October 2020. Preference was given to articles from journals with Quartiles Q1-Q3.

4. RESULTS

RECOMMENDATIONS FOR THE MANAGEMENT OF ONCOLOGICAL PATIENTS

In June 2020, the Ministry of Public Health of Ecuador issued recommendations for the management of cancer patients. In these guidelines, it is emphasized that before making decisions regarding the management of individuals with cancer, discussions should be held with them regarding the risks of starting or continuing cancer treatment. It is crucial to consider that most therapies are systemic, increasing the risk of complications if the patient becomes infected with the coronavirus. Therefore, the safety of oncology patients should be a priority, given their state of immunosuppression (10).

Among the steps for the personal protection of cancer patients and caregivers recommended by the Ministry of Public Health (MSP), we have: (See Table 1 and 2).

Additionally, other recommendations should be taken into account, such as cancer patients avoiding exposure to situations of Covid-19 infection risk by staying at home. Special attention should be paid to symptoms such as cough, fever, shortness of breath, myalgias, chills, nausea, diarrhea, runny nose, and vomiting within two weeks of contact with someone exhibiting these symptoms. Patients should contact their doctor or reference health center if they experience symptoms such as dry cough, chills with or without fever, shortness of breath, and throat irritation (12).

MANAGEMENT OF ONCOLOGICAL PATIENTS

To decide on the most appropriate management for oncological patients, it is necessary to identify individuals at higher risk and susceptibility. This prioritization should consider factors such as the type of cancer, age group, potential treatment benefit, therapeutic goal, impact of treatment delays or interruptions, availability of healthcare personnel, chemotherapy toxicity, immunosuppression, and thoracic radiotherapy affecting pulmonary function. Treatment may be deferred or virtual follow-ups for stable patients can be considered (11). (See Table 3).

For the prioritization of patients requiring systemic cancer therapy, the following steps should be taken: a) Classify patients based on treatment intent and associated risk-benefit relationship. b) Consider alternative and less intensive treatment regimens. c) Explore alternative methods for monitoring and reviewing patients receiving systemic therapies. Additionally, clinical oncologists should consider the level of immunosuppression associated with individual therapy and other patient risk factors (10).

RECOMMENDATIONS FOR THE MANAGEMENT OF BREAST CANCER

For the management of patients with breast cancer (BC), priorities must be established, which should be flexible according to the location and resources available. Outpatients with BC should be included in the urgent care approach since many of them will require treatment (8).

In deciding on in-person medical care and treatment, priorities should be based on the principles of non-maleficence, beneficence, and justice, considering two elements: patient need and treatment efficacy (8). Taking these considerations into account, patient decisions can be classified as follows: (See Table 4).

In the general recommendations for women with mammary oncological pathology, the same considerations apply to oncological patients in general. During the COVID-19 pandemic, indications for hormonal therapy in low-risk patients were temporarily reconsidered, taking into account the availability of facilities and healthcare resources, the number of necessary hospital visits, and the risks associated with compromising the immune system due to different types of treatments (13).

Therapeutic management behavior will depend on the clinical subtype and its severity, in addition to therapeutic approaches that include endocrine therapy, anti-HER2 therapy. There is a recommendation for increased use of radiotherapy or chemoradiation instead of surgical treatment, which poses a higher risk in these patients. Additionally, psychological care

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should be provided to BC patients during the SARS-CoV-2 pandemic (13).

5. DISCUSSION

The Ministry of Public Health (MSP) and the Ecuadorian Society of Obstetrics (SOE) recommend minimizing visits by cancer patients to Health Centers to reduce exposure to the SARS-CoV2/Covid-19 virus. Similarly, Al-Shamsi et al., in their publication in The Oncologist on March 16, 2020, advocate for minimizing outpatient visits for cancer patients as much as possible to mitigate the risk of Covid-19 infection. Moreover, endorse the MSP's general recommendations on hand hygiene, infection control measures, and monitoring Covid symptoms for patients who have been in contact with symptomatic individuals (14).

In the prioritization classification for breast cancer patient care by the SOE, three priorities (high, medium, and low) have been defined based on patient needs, along with six types of treatment efficacy-related priorities. Similarly, Azambuja E., et al., in their publication on April 26, 2020, establish three priorities for determining patient management (13). Furthermore, Ng CWQ., et al., delineate in their article that prioritizing breast oncology patients should involve a four-phase approach, tailored to the patient's illness needs, with Phase 1 indicating the lowest risk of complications and Phase 4 posing the highest risk of mortality (15).

The provided information underscores the critical considerations and guidelines for managing oncological patients during the Covid-19 pandemic, particularly focusing on the recommendations from the Ministry of Public Health of Ecuador. These guidelines highlight the importance of a patient-centered approach, considering the increased vulnerability of individuals with cancer due to their immunosuppressed state. The following key points are discussed:

Prioritization and Flexibility in Cancer Care: The Ministry of Public Health emphasizes the need for flexibility in establishing priorities for cancer care, recognizing the diverse settings and resources available. Outpatients with cancer are specifically mentioned as needing urgent attention due to potential treatment requirements (8).
Personal Protection Measures: Tables 1 and 2 outline personal protection measures for cancer patients and their caregivers. These guidelines provide practical steps to mitigate the risk of Covid-19 exposure, considering the systemic nature of cancer therapies that may increase susceptibility to complications.

Patient Communication and Monitoring: Recommendations urge oncology patients to avoid potential infection sources, stay at home, and be vigilant about Covid-19 symptoms. Early communication with healthcare providers is encouraged to address concerns promptly (12).

Treatment Decision-making and Prioritization Criteria: The discussion emphasizes the complexity of deciding on the most appropriate management for oncological patients. Prioritization criteria, including cancer type, age, potential treatment benefit, and availability of healthcare resources, are crucial factors. The guidelines highlight the need for considering alternative and less intensive treatment regimens and exploring virtual follow-ups for stable patients (11).

Systemic Therapy and Immunocompromised Patients: The guidelines acknowledge the temporary reconsideration of hormonal therapy in low-risk patients during the pandemic, considering healthcare facility availability and potential immunosuppression risks associated with various treatments (13).

Patient Classification and Alternative Monitoring: To prioritize patients for systemic cancer therapy, a classification based on treatment intent and risk-benefit analysis is recommended. Exploring alternative monitoring methods and considering patient immunosuppression levels are crucial aspects of decision-making (10).

6. CONCLUTION

The managing oncological patients during the Covid-19 pandemic required a nuanced and patient-specific approach. The provided recommendations prioritize patient safety, ensuring that treatment decisions consider the unique challenges posed by the pandemic. The emphasis on flexibility, communication, and alternative strategies reflects a comprehensive effort to balance cancer care with the realities of the ongoing global health crisis.

For proper management of women with breast cancer, it is necessary to adhere to general recommendations for oncology patients, with a primary focus on determining the risk-benefit ratio of treatment, taking into account the patient's opinion after discussing the matter with her. As a crucial point, minimizing the risk of Covid-19 transmission is essential by following protocols and minimizing the time spent at the Health Center as much as possible

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7. TABLES

Table 1
Recomendation managementof oncology patient in Covid 19

RECOMMENDATIONS
Hand washing with soap and water or with a 70% alcohol-based solution.
Covering the mouth when coughing or sneezing with a tissue or paper, disposing of it, and washing hands.
Avoiding touching the face with unwashed hands.
Cleaning and disinfecting objects or surfaces frequently..
Avoiding close contact with people and maintaining a distance of more than 1 meter between each other (avoiding crowded places, gatherings, especially indoors, and avoiding contact with someone who has cough, fever, or difficulty breathing).
Not sharing objects that touch the mouth, such as bottles, glasses, or cups.
Avoiding handshakes.
Practicing social distancing.

Note: Recommendations for the management of oncology patients during the SARS-CoV2/Covid-19 pandemic, Ministry of Public Health of Ecuador, 2020. pp. 11-12.

Table 2
Recommendations for caregivers of oncology patients in Covid 19

Recommendations for caregivers of oncology patients
Caregivers of cancer patients should adhere to standard precautionary guidelines such as hand washing, respiratory hygiene measures, waste management, equipment sterilization, etc.
Ensure that all patients cover their mouth and nose when sneezing or coughing.
Establish separate rooms for the admission of oncology patients suspected of Covid-19 or maintain at least 1 meter of distance between beds.
Healthcare providers for cancer patients should wear clean and sterile personal protective equipment.
Limit the use of aerosol-generating procedures and equipment in cancer patients.
Perform hand hygiene after visiting each patient.

Note: Adapted from Recommendations for the management of oncology patients during the SARS-CoV2/Covid-19 pandemic, Ministry of Public Health of Ecuador, 2020. pp. 11-12

Table 3
Risk Factors Managementof Oncology Patient In Covid 19

RISK FACTORS	
PATIENTS AT HIGHER RISK OF SEVERE COVID-19 ILLNESS	• Individuals receiving active chemotherapy or radiation therapy. • Individuals with leukemias, lymphomas, multiple myeloma, at any stage of treatment. • Individuals receiving immunotherapy or other continuous antibody treatments for cancer. • Individuals receiving other cancer-targeted treatments affecting the immune system, such as protein kinase inhibitors or PARP inhibitors. • Individuals who have undergone bone marrow or stem cell transplants in the last 6 months, or are still taking immunosuppressive medications.
ACTORS ASSOCIATED WITH WORSE PROGNOSIS	• Individuals over 60 years of age. • Pre-existing cardiovascular disease. • Pre-existing respiratory disease.
Note: Adapted from National Health Service (NHS). Clinical guide for the management of cancer patients during the coronavirus pandemic. NHC. 2020; pag. 1–8.	

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Table 4
Consideration managementof oncology patient in Covid 19

Considerations		
Need	Severity of symptoms	• Uncontrolled pain • Potentially life-threatening complications of the disease
Effectiveness	• Treatment effectiveness • Control of unstable or potentially life-threatening situations	
***Note*:** Adapted from Soria T., et al. Recommendations for the management of breast cancer patients during the SARS-COV-2/COVID-19 pandemic.		

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