

Breast Reconstruction in Cancer Patients during the COVID-19 Pandemic

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Reconstrução Mamária em Pacientes Oncológicos durante a Pandemia da Covid-19

Reconstrucción Mamaria en Pacientes con Cáncer durante la Pandemia de Covid-19

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INTRODUCTION

The pandemic provoked by the new coronavirus (219-nCoV) brought innumerable changes in the society, affecting the healthcare services, either by the unplanned demand for care or the necessity of creating and maintaining the regular treatment of several health conditions as cancer. In addition, the oncologic patients are more susceptible to the development of respiratory alterations because of the immunosuppression resulting from cancer treatment. Therefore, it is a great challenge to conduct the oncologic treatment in the moment of this pandemic by the severe acute respiratory syndrome coronavirus 2 – Sars-CoV-2¹.

In this context, it is necessary to discuss the benefits of initiating, maintaining or suspending breast cancer treatment during the pandemic. The risk of evolution to the severe form of the disease by the coronavirus 2019 (coronavirus Disease 2019 – COVID 19) and worsening the prognosis of cancer resulting from delaying the beginning of the oncologic treatment must be considered. Studies conducted in our population, before the pandemic, show that great part of the patients have an estimated delay between three and six months from the confirmed diagnosis of cancer and the beginning of the oncologic treatment. The delays of the first medical attendance after the beginning of the symptoms and the conclusion of the diagnosis and the beginning of the treatment are strongly associated to the worsening of the prognosis of the patients with breast cancer, with possible repercussion in the survival^{2,3}.

Bearing in mind the current situation, in this document the recommendations for the approach of the patients who need surgical cancer treatment with breast reconstruction in the Hospital of Cancer III of the

National Cancer Institute José Alencar Gomes da Silva (INCA) during the Sars-CoV-2/Covid-19 pandemic were compiled.

DEVELOPMENT

Selection of patients and surgical indication

The selection for breast reconstruction surgery must be thorough and individual. The analysis must comprehend the oncologic aspects, the presence of comorbidities and the patient's comprehension, acceptance and wish.

Several guidances from entities and medical societies recommend thorough selection of eligible patients for surgical treatment during the pandemic^{4,6}. The elective and non-urgent procedures must be postponed because of the possibility of increasing the risk of developing the severe form of COVID-19. However, cases where the delay to conduct the surgery may affect the prognosis (complications and surgical) must be taken into consideration for the approach.

Unquestionably for the patients with locally advanced tumors whose neoadjuvant treatment was performed, the surgery should not be postponed. In these situations, the technique to be considered, when possible, must have less morbidity for fast recovery and environmental exposure to Sars-CoV-2/COVID-19.

In cases of less aggressive tumors or at initial staging, the decision should be individualized, multidisciplinary, with direct participation of the patients. It must be considered the availability of beds, material resources (mainly, personal protection equipment - PPE for patients and healthcare providers) and human resources. When the decision is favorable to surgery, faster reconstructions with less morbidity must be indicated, complementing the initial therapeutic proposal.

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PARTICULARITIES AND FOLLOW UP

The patients are submitted to strict screening at arrival, admission and through the entire period of hospitalization, in order to evaluate the existence of respiratory symptoms which, if compatible with those of the COVID-19 infection, lead to the suspension of the operatory act and beginning of the diagnostic flow and specific treatment.

Further to the usual precautions, several additional measures are required. Perioperative care, in complementation to universal precautions and anesthetic caution are indicated, pursuant to institutional protocols. These precautions comprehend the use of specific PPE and exposure in the moments of intubation and extubation only by the limited required number of professionals, among others.

CONSIDERATIONS

Several problems and dilemmas appear with the effects of the pandemic over the oncologic assistance. Each institution has characteristics in relation to capacity, support and volume of consultation. The moment of the treatment commencement is a crucial topic of this analysis.

In several places, demand exceeds the capacity of the system's response and the access happens usually with great delay for the therapeutic beginning. In a scenario of great demand and difficulties of diagnosis and access, the deferment of a planned procedure can make the difference in the final outcome.

The entire multidisciplinary team must be informed about the necessary care and participate of the whole stages of the assistance. Providing and sharing information for decision taking is essential.

CONCLUSION

The therapeutic decision must be continuous with modification of the conducts and indications, if scenario changes are required. The maintenance of the oncologic assistance must be preserved because of the existing complexity in most of the cases, characteristics of operation of the entire public health system, with individualization and emphasis in the patients' safety, their relatives and healthcare providers involved in the assistance.

CONTRIBUTIONS

Frederico Lucas contributed substantially for the conception, gathering, analysis and interpretation of the data, wording and critical review. Anke Bergmann, Marcelo Bello, Fabiana Tonello and Brasil Caiado Neto

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DECLARATION OF CONFLICT OF INTERESTS

There is no conflict of interests to declare.

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REFERENCES

1. Thuler LCS, Melo AC. Sars-CoV-2/Covid-19 em Pacientes com Câncer. *Rev Bras Cancerol*. 2020;66(6):e-00970. doi: <https://doi.org/10.32635/2176-9745.RBC.2020v66n2.970>
2. Medeiros GC, Thuler LCS, Bergmann A. Delay in breast cancer diagnosis: a Brazilian cohort study. *Public Health*. 2019 Feb;167:88-95. doi: <https://doi.org/10.1016/j.puhe.2018.10.012>
3. Monteiro SO. Atrasos no tratamento do câncer de mama: fatores associados em uma coorte de mulheres admitidas em um centro de referência do Rio de Janeiro [dissertação]. Rio de Janeiro (RJ): Fundação Oswaldo Cruz, Escola Nacional de Saúde Pública Sergio Arouca; 2016 Julho. Introdução; p. 15.
4. Conselho Regional de Medicina do Estado do Rio de Janeiro. Recomendação do CREMERJ em relação a procedimentos e cirurgias eletivas [Internet]. Rio de Janeiro (RJ): CREMERJ; 2020 Abr 09 [acesso 2020 abr 13]. Available from: <http://old.cremerj.org.br/downloads/1228.PDF>
5. Sociedade Brasileira de Cirurgia Oncológica. Epidemia de COVID 19: III pronunciamento Sociedade Brasileira de Cirurgia Oncológica em relação ao diagnóstico e cirurgias de pacientes com câncer [Internet]. Rio de Janeiro (RJ): Sociedade Brasileira de Cirurgia Oncológica; 2020 mar 16 [atualizado 2020 mar 20; acesso 2020 abr 13]. Available from: <https://www.sbco.org.br/central-de-noticias/view/epidemia-de-covid-19-pronunciamento-sociedade-brasileira-de-cirurgia-oncologica>
6. Diretoria Executiva Nacional, Sociedade Brasileira de Cirurgia Plástica. Informe V – SBCEP-COVID -19 [Internet]. São Paulo (SP): Sociedade Brasileira de Cirurgia Plástica; 2020 abr 1 [acesso 2020 abr 13]. Available from: <http://www2.cirurgiaplastica.org.br/wp-content/uploads/2020/04/Informe-V-SBCEP-Covid-19.pdf>

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