

Recommendations for patients undergoing bariatric surgery regarding immunization against COVID-19

Recomendações aos pacientes submetidos a cirurgia bariátrica em relação à imunização contra o COVID-19

Recomendaciones para pacientes sometidos a cirugía bariátrica con respecto a la inmunización frente a COVID-19

Lincoln Agudo Oliveira Benito¹, Rosana da Cruz Lima², Margô Gomes de Oliveira Karnikowski³, Izabel Cristina Rodrigues da Silva⁴

How to cite: Benito LAO, Lima RC, Karnikowski MGO, Silva ICR, Costa LR. Recommendations for patients undergoing bariatric surgery regarding immunization against COVID-19. REVISA. 2021;10(2):220-3. Doi: <https://doi.org/10.36239/revisa.v10.n2.p220a223>

REVISA

1. Universidade de Brasília. Graduate Program in Science and Technology and Health. Brasília, Federal District, Brazil.

<https://orcid.org/0000-0001-8624-0176>

2. Hospital das Plásticas de Brasília. Brasília, Federal District, Brazil.

<https://orcid.org/0000-0002-2881-1193>

3. Universidade de Brasília. Graduate Program in Science and Technology and Health. Brasília, Federal District, Brazil.

<https://orcid.org/0000-0002-5662-2058>

4. Universidade de Brasília. Graduate Program in Science and Technology and Health. Brasília, Federal District, Brazil.

<https://orcid.org/0000-0002-6836-3583>

Received: 18/01/2021

Accepted: 28/03/2021

Obesity (CID 10: E-66) is a chronic disease resulting from the accumulation of adipose tissue, related to body mass index (BMI) equal to or greater than 30, multifactorial, and also, with interaction with behavioral, cultural, genetic, metabolic, social, economic and political factors.^{1,2} According to data provided by the World Health Organization (WHO) since 1975, the problem of obesity and morbid obesity has almost tripled worldwide, and in 2016, about 1.9 billion adults, who were already aged 18 years or older, would be more likely to be diagnosed with this disease.²⁻³

For several researchers interested in this important theme, the prevalence of obesity has grown very strongly in recent decades, according to some studies, especially in countries that are in the process of development, industrialization or post-industrialization.³⁻⁴

Numerous comorbidities are associated with this public health issue, such as hypertension (AH), diabetes mellitus (DM), obstructive sleep apnea syndrome (OSAS), metabolic syndrome (MS), various types of cancers (AC), among others, with bariatric surgery (CB) being one of the main ways to combat and control obesity.^{1-5,16} On the other hand, in December 2019, in Hubei Province, China, an outbreak of pneumonia that is believed to have been triggered by a new coronavirus strain was identified by testing and medical diagnosis, which was detected by testing and medical diagnosis, which allowed its spread in an accelerated manner to at least twenty-four (24) other nations..^{6-7,12}

On December 29 of the same year, a hospital institution located in Wuhan admitted for health treatment, the number of four (04) people who were diagnosed with pneumonia, being recognized that they had developed work activities in the Huanan Wholesale Seafood Market.^{7-9,12} This phenomenon was effectively reported by the hospital to the Center for Disease Control (CDC-China), and the field epidemiologists of China (FETP-China), managed through their efforts to identify additional patients, who were linked to the incident that occurred in the seafood market and, already on December 30, the competent authorities in health, reported this cluster to the Chinese CDC.^{8,12}

In a recent publication, developed by the Latin American Federation of Obesity Societies, the pandemics of obesity and COVID-19 were analyzed, in addition to their direct and indirect developments in several nations.^{5,12} Today, February 28, 2021, they are registered with the Coronavirus Resource Center of Johns Hopkins University, the universe of "113,894,300" global cases recorded, and the ten (10) nations currently with the highest case records were the United States with 25.1% (n=28,558,289), India with 9.7% (n=11,096,731), Brazil with 9.2% (n=10,517,232), Russia with 3.7% (n=41,984,400), England with 3.7% (n=4,182,788), France with 3.3% (n=3,747,263), Spain with 2.8% (n=3,188,553), Italy with 2.6% (n=2,907,825), Turkey with 2.4% (n=2,693,164) and Germany with 2.1% (n=2,448,135).¹⁰

When analyzing the number of deaths due to COVID-19 by the same global case registration portal, it was possible to identify that the United States recorded the highest preponderance with 20.3% (n=512,181), followed by Brazil 10.1% (n=254,221), Mexico with 7.3% (n=181,051), India with 6.2% (n=157,051), England with 4.9% (n=122,939), Italy with 3.9% (n=97,507), France with 3.4% (n=85,741), Russia with 3.4% (n=84,700), Germany with 2.8% (n=70,106) and Spain with 2.7% (n=69,142), respectively.¹¹ Thus, one of the main mechanisms for combating and controlling COVID-19 is through the immunization process, and this important strategy is approved in Brazil by the National Health Surveillance Agency (ANVISA), through a decision on the emergency use, on an experimental basis of vaccines.¹²⁻¹³

This important national body, related to the National Health Surveillance System (SNVS), was created by Law number 9,782 of January 26, 1999, and that, according to its third article (3rd), it is constituted as an autarchy under special regime, linked to the Ministry of Health (MS), with its office and foreign in the Federal District (DF), of indeterminate duration and acting throughout the national territory.¹⁴ In this sense, another important document to be cited in this analytical context is ministerial decree number 188 of February 3, 2020, which declares an emergency in public health of national importance (ESPIN), due to human infection by the new coronavirus (2019-nCoV).¹⁵

Thus, the scientific literature points out that morbid obesity is a disease that increases the risk of developing the severe forms of COVID-19, and vaccination is indicated for patients undergoing bariatric surgery (CB) by the Brazilian Society of Bariatric and Metabolic Surgery (SBCBM).¹⁶ Thus, the SBCBM made available some recommendations for patients undergoing this surgical procedure, aiming to contribute to the containment of the impacts of this disease, being suggested immunization against COVID-19, characterized as an individual and shared decision with the surgeon, besides emphasizing the use of masks and personal protective equipment (PPE), also providing nutritional recommendations and dietary supplementation indicated by the multidisciplinary team.¹⁶

Also according to the SBCBM, obesity and associated diseases are usually powerful risk indicators for the expansion of Severe Acute Respiratory Syndrome (SRS), and people should prioritize vaccination, maintain care and develop actions to control these diseases.¹⁶ It is also recommended, the rigorous medical follow-up of these patients, even after vaccination, in addition to the control of nutritional status, evaluation by a professional periodically, the implementation of physical activity, emotional and psychological follow-up, hand hygiene carefully and the use of alcohol gel.¹⁶

In this sense, the importance and need for vaccination of people submitted to CB is reiterated, according to the schedules and schedules stipulated for its realization, respecting the criteria established by the competent agencies, responsible for the organization and management of all processes related to this important health activity. The fight and control of both obesity and COVID-19 are the responsibility of the whole society, aiming to reduce the impacts of these "pandemics", their comorbidities and these important public health issues, strongly identified in contemporary times.

Acknowledgment

This research did not receive funding for its realization.

References

- 1 - Associação Brasileira para o Estudo da Obesidade e da Síndrome Metabólica. Obesidade e sobrepeso. O que é obesidade. Disponível em: [<https://abeso.org.br/conceitos/obesidade-e-sobrepeso/>]. Acesso em: 14 de fevereiro de 2021.
- 2 - World Health Organization. Home. Newsroom. Fact sheets. Detail. Obesity and overweight. Key facts. Disponível em: [<https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>]. Access in: 14 february 2021.
- 3 - World Health Organization. Home. Newsroom. Fact sheets. Detail. Obesity and overweight. Key facts. WHO response. Disponível em: [<https://www.who.int/news-room/fact-sheets/detail/obesityandoverweight>]. Access in: 06 february 2021.
- 4 - Associação Brasileira para o Estudo da Obesidade e da Síndrome Metabólica. Obesidade e síndrome metabólica. O que é síndrome metabólica. Disponível em: [<https://abeso.org.br/conceitos/obesidade-esindrome-metabolica/>]. Acesso em: 14 de fevereiro de 2021.
- 5 - Halpern B, Louzada MLC, Aschner P, et al. Obesity and COVID-19 in Latin America: A tragedy of two pandemics—Official document of the Latin American Federation of Obesity Societies. *Obesity Reviews*. 2021; 22:e13165. doi: <https://doi.org/10.1111/obr.13165>.
- 6 - Peng X, Xu X, Li Y, Cheng L, Zhou X, Ren B. Transmission routes of 2019-nCoV and controls in dental practice. *Int J Oral Sci*. 2020;12(1):9. doi: <https://doi.org/10.1038/s41368-020-0075-9>.
- 7 - Zhu N, Zhang D, Wang W, et al. A novel coronavirus from patients with pneumonia in China, 2019. *N Engl J Med*, 2020. doi: <https://doi.org/10.1056/NEJMoa2001017>.
- 8 - Brasil. Ministério da Saúde. Secretaria de Vigilância em Saúde. Centro de Operações de Emergências em Saúde Pública - COE-COVID-19. Plano de Contingência Nacional para Infecção Humana pelo novo Coronavírus COVID-19. Brasília: MS. 2020. 24p.
- 9 - Perlman S. Another decade, another coronavirus. *N Engl J Med*. 2020; 382:760-762. doi: <https://doi.org/10.1056/NEJMe2001126>.
- 10 - Johns Hopkins University. Coronavirus Resource Center. Covid-19 Dashboard by the Center for Systems Science and Engineering. Global cases. Available in: [<https://coronavirus.jhu.edu/map.html>]. Access in: 28 february 2021.

11 - Johns Hopkins University. Coronavirus Resource Center. Covid-19 Dashboard by the Center for Systems Science and Engineering. Global deaths. Available in: [<https://coronavirus.jhu.edu/map.html>]. Access in: 28 february 2021.

12 - Agência Nacional de Vigilância Sanitária. Relatório - Bases técnicas para decisão do uso emergencial, em caráter experimental de vacinas contra a COVID-19. Brasília: Anvisa. 2021, 27p. Disponível em: [<https://www.gov.br/anvisa/pt-br/assuntos/noticias-anvisa/2021/confirma-materiais-da-reuniao-extraordinaria-da-dicol/relatorio-bases-tecnicas-para-decisao-do-uso-emergencial-final-4-1.pdf>]. Acesso em: 24 de fevereiro de 2021.

13 - Organização Pan-Americana da Saúde. Folha informativa COVID-19. Principais informações. Disponível em: [<https://www.paho.org/pt/covid19>]. Acesso em: 28 fevereiro de 2021.

14 - Brasil. Presidência da República. Casa Civil. Subchefia para Assuntos Jurídicos. Lei nº 9.782, de 26 de janeiro de 1999. Define o Sistema Nacional de Vigilância Sanitária, cria a Agência Nacional de Vigilância Sanitária, e dá outras providências. Disponível em: [http://www.planalto.gov.br/ccivil_03/leis/19782.htm]. Acesso em: 24 de fevereiro de 2021.

15 - Brasil. Ministério da Saúde. Gabinete do Ministro. Portaria nº 188, de 3 de fevereiro de 2020. Declara Emergência em Saúde Pública de importância Nacional (ESPIN) em decorrência da Infecção Humana pelo novo Coronavírus (2019-nCoV). Disponível em: [<https://www.in.gov.br/en/web/dou/-/portaria-n-188-de-3-de-fevereiro-de-2020-241408388>]. Acesso em: 25 de fevereiro de 2021.

16 - Sociedade Brasileira de Cirurgia Bariátrica e Metabólica. Home. Notícias. Notícias Associados. Notícias Destaque. SBCBM recomenda aos pacientes bariátricos a vacinação contra o coronavírus. Disponível em: [<https://www.scbm.org.br/scbm-recomenda-aos-pacientes-bariatricos-vacinacao-contra-o-coronavirus/>]. Acesso em: 24 de fevereiro de 2021.

Correspondent Author

Lincoln Agudo Oliveira Benito
SEPN 707/907, Via W 5 North, University
Campus. ZIP: 70790-075. Asa Norte.
Brasília, Federal District, Brazil.
lincolnbenito@yahoo.com.br