

## Comparison among three protocols related to the return of sport during COVID-19 pandemic

### *Comparação entre três protocolos para o retorno ao esporte durante a pandemia de COVID-19*

José Eduardo Nóbrega Moura<sup>1</sup>, Isadora de Albuquerque Falcão Feitosa<sup>1</sup>,  
Gabriel Melo Caldas Nogueira<sup>1</sup>, Pedro Vilar de Oliveira Villarim<sup>1</sup>,  
Thales Augusto Lopes Teixeira<sup>1</sup>, Josivan Gomes de Lima<sup>2</sup>

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**ABSTRACT:** *Introduction:* As the COVID-19 spread across the world, many activities had to adapt to the new challenging scenario, involving new safety measures such as strategies of social isolation. Since professional sports have a considerable potential of causing agglomerations, they also had their competitions suspended or postponed. However, as the situation lasted longer than previously expected, there was a necessity to get these tournaments resumed with adaptations. So that could happen safely and in agreement with the current moment, the creation of effective protocols and in harmony with the medical guidelines became essential. *Objective:* To compare the protocols published by the institutions of some professional sports events and leagues and to point possible contributions that can be given by the medicine, especially sports medicine at a COVID-19 pandemic scenario. *Methods:* This is a narrative review made in two research phases: in databases (PubMed, ScienceDirect and Scielo) and in official sites and wide visibility daily journals. The data were collected during 2020 August. The *Union of European Football Associations* (UEFA), *National Basketball Association* (NBA) and *Confederação Brasileira de Futebol* (CBF) protocols were selected. *Results:* Different strategies established by the institutions against COVID-19s dissemination were found. UEFA and NBA converged with the strict rules' definition for the players and staff members isolation, virus testing guidelines and teams transfer between games. These resources, however, were not present in CBF's politics, since the organization did not follow the same rigidity. The organizations, nevertheless, had one common proposition: the crowd suspension during the games. Besides that, in both protocols, the athletes' physical integrity issue was not approached. *Conclusion:* The organizations' measures focused on control of the virus transmission and the safety of all involved during COVID-19's pandemic, that demonstrates a cooperative work and a close medical participation with the sports community. Either way, a better clinical perspective in muscular health and athletes' immunity was demonstrated necessary.

**Keywords:** Sports; Athletes; Medicine; Coronavirus infections.

**RESUMO:** *Introdução:* Durante a pandemia do COVID-19, várias atividades foram adaptadas a esse novo e desafiador cenário, envolvendo novas medidas de segurança e estratégias de isolamento social. Os esportes profissionais, por serem capazes de promover aglomerações, também tiveram suas competições suspensas ou adiadas. Entretanto, como a situação durou mais que o previsto inicialmente, os campeonatos foram retomados com adaptações. Para que isso ocorresse da forma mais segura possível, tornou-se fundamental a criação de protocolos efetivos e em consonância com as diretrizes médicas. *Objetivo:* Comparar os protocolos divulgados pelas organizações e ligas de esportes profissionais, bem como apontar possíveis contribuições da medicina, em especial, a esportiva em um cenário de pandemia de COVID-19. *Metodologia:* Trata-se de uma revisão narrativa da literatura, realizada em bases de dados (PubMed, ScienceDirect e Scielo) e em sites oficiais e jornais de ampla visibilidade. Os dados foram coletados durante o mês de agosto de 2020. Os protocolos da *Union of European Football Associations* (UEFA), *National Basketball Association* (NBA) e *Confederação Brasileira de Futebol* (CBF) foram selecionados. *Resultados:* Verificaram-se diferentes estratégias estabelecidas pelas instituições no combate à disseminação da COVID-19. A UEFA e a NBA convergiram no tocante às rígidas diretrizes de testagem para o vírus, de traslados das equipes e de isolamento dos jogadores e comissões técnicas. Contudo, as políticas da CBF analisadas não seguiram o mesmo rigor. Uma semelhança em todos os protocolos foi a proibição das torcidas nos jogos. Além disso, constatou-se que a questão da integridade física muscular dos atletas não foi abordada nos protocolos das ligas esportivas. *Conclusão:* As medidas adotadas pelas organizações focam no controle da transmissão do vírus e na segurança dos entes envolvidos quanto à pandemia de COVID-19, o que demonstra um trabalho cooperativo e uma atuação da medicina mais próxima da comunidade esportiva.

**Palavras-chave:** Esportes; Atletas; Medicina; Infecções por Coronavírus.

1. Medicine students at Universidade Federal do Rio Grande do Norte. ORCID: Moura JEN - <https://orcid.org/0000-0002-4661-920X>; Feitosa IAF - <https://orcid.org/0000-0003-2002-6059>; Nogueira GMC - <https://orcid.org/0000-0003-1908-6476>; Villarim PVO - <https://orcid.org/0000-0002-9504-8589>; Teixeira TAL - <https://orcid.org/0000-0002-6896-3597>. E-mail: Moura JEN - [joseeduardonmoura@gmail.com](mailto:joseeduardonmoura@gmail.com); Feitosa IAF - [isadorafalcaofeitosa@gmail.com](mailto:isadorafalcaofeitosa@gmail.com); Nogueira GMC - [gabrielmap@gmail.com](mailto:gabrielmap@gmail.com); Villarim PVO - [pedrovillarim123@gmail.com](mailto:pedrovillarim123@gmail.com); Teixeira TAL - [thalesaugustotl@gmail.com](mailto:thalesaugustotl@gmail.com)
2. Professor at Clinical Medicine Department, Hospital Universitário Onofre Lopes, UFRN. <https://orcid.org/0000-0002-1627-7018>. E-mail: [josivanlima@gmail.com](mailto:josivanlima@gmail.com)

**Correspondence:** Hospital Universitário Onofre Lopes: Av. Nilo Peçanha, 620 - Petrópolis, Natal - RN. CEP: 59012-300

## INTRODUCTION

In early December 2019, the first cases of pneumonia of unknown cause were reported in Wuhan City in China<sup>1</sup>. As research progressed, in January 2020, scientists discovered that the new pathology's etiologic agent was from the coronavirus family. Other viruses of this strain had previously been registered: SARS-CoV, identified in 37 countries, and MERS-CoV, which, in the Middle East, infected approximately 2500 people<sup>2</sup>. The new coronavirus has spread throughout China and has taken on international proportions. In February 2020, it was cataloged as Severe Acute Respiratory Syndrome (SARS-CoV-2)<sup>2</sup>. On March 11, 2020, the World Health Organization (WHO) declared that the disease (COVID-19) had reached the level of pandemic<sup>3</sup>.

In face of this challenging reality, it was necessary to implement changes in the most diverse activities: the home office became part of the daily life of workers more intensely<sup>4</sup>, schools and sports activities had their practices suspended and commercial establishments imposed strict limitations on the customer access<sup>5</sup>. All these changes were made with the aim of mitigating the spread of the disease by avoiding agglomerations, as this occurs by droplets ejected by coughing or sneezing in symptomatic or asymptomatic patients<sup>6,7</sup>. In some locations, more extreme, a rigid model of social isolation called lockdown was imposed<sup>8</sup>.

In general, sports events have a great agglomeration potential, and consequently, they can facilitate the spread of respiratory diseases such as COVID-19. Hence, they were largely affected by the new reality. Some sports, such as soccer and basketball, are always remembered for their great fans arranged in vast stands: the National Basketball Association (NBA), the biggest basketball league today, had an average of 18,976 spectators per game in 2019<sup>9</sup>, and the final of the Union of European Football Associations (UEFA) Champions League, the most prestigious and renowned football club championship today, reached 68,000 fans<sup>10</sup>.

Due to these large audiences reached, fans end up at very small distances from each other. In addition, the organization of professional championships requires the work and performance of many people with different functions, from athletes and the technical team to the employees responsible for maintaining the sites, which makes compliance with social distancing guidelines an arduous task. These characteristics inherent to professional sport made it essential to postpone indefinitely and even suspend activities<sup>11-14</sup>.

It is believed that economic issues were great motivators for the resumption of training and games, as long as they respected strict safety protocols<sup>15-17</sup>. In agreement with that is the fact that the NBA has estimated a deficit equivalent to \$2 billion if the 2019-2020 season were

anceled completely<sup>18</sup>.

Inside this context, medicine acquires significant value and importance. This relevance had already been noticed with the technological and research advances in the field of sports medicine — a specialty that takes care of the individual under a broader approach, with physical exercise and sport being the tools analyzed and used in health improvement<sup>19</sup>.

With higher investments and an increased audience in professional sports, the preparation of athletes required greater refinement of the technical knowledge involved in increasing performance, through strategies that include: (1) food and supplementation, (2) sleep, and (3) strength training<sup>20,21,22</sup>. In other words, in the midst of the COVID-19 pandemic, medicine could have the opportunity to present significant contributions to sports in terms of both technical knowledge about disease prevention and transmission, and the perspective of maintaining physical characteristics and physiological factors necessary for high performance.

A brief search in the databases revealed that the theme — “protocols for the return of sports practice” — was not widely addressed, which ended up causing the following questions: what is the role of medicine in this process? Is this participation happening and has not yet acquired visibility and expression in the academic world?

Thus, the aim of this study is to compare the protocols published by organizations and professional sports leagues, as well as to point out possible contributions from medicine, especially sports, in a COVID-19 pandemic scenario.

## METHODS

This is a narrative review of the literature, carried out in August 2020. The investigation was developed in two stages: the first, a research for protocols in the PubMed, ScienceDirect, and SciELO databases; and the second, research on the association's official websites and in newspapers with international impact.

In the first stage, searches were performed in English, French, and Portuguese, between August 17 and September 10, 2020. In English, 104 results were obtained, eleven (11) in Pubmed, ninety-three (93) on ScienceDirect, and zero (0) on SciELO. In the French language, only two (2) results were found in the ScienceDirect database. However, these studies, those in English and French, were discarded due to the inadequacy of the proposed theme. The Pubmed and SciELO databases do not show results in the French language regarding the investigated topic. In Portuguese, no results were found in any of the three databases mentioned.

Still referring to the first stage of investigation, the following keywords and search strategies were adopted:

((protocolo) AND (esporte) AND (medicina) AND (COVID-19)); ((protocole) AND (sport) AND (médecine) AND (COVID-19)); ((protocol) AND (sports) AND (medicine) AND COVID-19)) e (((“protocol”[All Fields] OR “protocol s”[All Fields]) OR “protocolized”[All Fields] OR “protocols”[All Fields]) AND (((“sport s”[All Fields] OR “sports”[MeSH Terms]) OR “sports”[All Fields]) OR “sport”[All Fields]) OR “sporting”[All Fields]) AND ((((((“medicin”[All Fields] OR “medicinal”[All Fields]) OR “medicinally”[All Fields]) OR “medicinals”[All Fields]) OR “medicine”[MeSH Terms]) OR “medicine”[All Fields]) OR “medicine s”[All Fields] OR “medicines”[All Fields]) AND ((((((“covid 19”[All Fields] OR “covid 2019”[All Fields]) OR “severe acute respiratory syndrome coronavirus 2”[Supplementary Concept]) OR “severe acute respiratory syndrome coronavirus 2”[All Fields]) OR “2019 ncov”[All Fields]) OR “sars cov 2”[All Fields]) OR “2019ncov”[All Fields]) OR (“wuhan”[All Fields] AND (“coronavirus”[MeSH Terms] OR “coronavirus”[All Fields]))).

In the second stage, were covered the official websites of the Union of European Football Federations (UEFA), National Basketball Association (NBA), New York Times, Columbia Broadcasting System (CBS), Entertainment and Sports Programming Network (ESPN), and the Brazilian Confederation of Football (CBF).

On the UEFA’s website, the official protocol that the organization’s competitions should adopt was found<sup>23</sup>. It is important to highlight that the UEFA protocol is in its third version<sup>24</sup>, which is not the object of investigation since the proposed discussion concerns the first collective effort to resume sports in the course of a COVID-19 pandemic. The version adopted was the version valid on August 5, 2020, which will be called version 1.

On the NBA, New York Times, CBS, and ESPN websites, only a few articles were available that mentioned measures of the official protocol, without, however, systematically presenting them in a single document<sup>25-30</sup>. Finally, on the CBF website, the official protocol to be followed by Brazilian football competitions was found<sup>31</sup>.

The study was limited to evaluating only the CBF, UEFA, and NBA protocols, as they were the only protocols found in the period studied. Since these institutions are, respectively, Brazilian, European and, American, it is assumed that they are representative of what has been done worldwide concerning the security measures adopted for the return of sports activities in a context of a pandemic of COVID-19.

## RESULTS

The UEFA protocol (version 1) states that the organization has, as a premise, the establishment of safety and hygiene measures, which must be applied during the organized matches, with the main objective of guaranteeing

the integrity of the players, technical staff, arbitration team, and members of the risk groups present in the matches. These guidelines were approved and evaluated by a group of health experts and are subject to change if required by the health scenario of the places where the games will be held or by the legislation of the countries involved<sup>23</sup>.

These determinations establish as little contact as possible between different groups and teams. Thus, the objective is to reduce the possibility of any cross-contamination, which can minimize the number and frequency of COVID-19 tests required. Among the various preventive measures, the main one is to respect the minimum distance of two meters between people in hotels and stadiums. Regarding the teams’ accommodation, some specific measures were suggested, such as the preference for individual rooms and exclusive hotels for each one of the teams<sup>23</sup>. It is also worth highlighting the adaptations made to the teams’ transport: buses should be sanitized before and after use by the delegation and the driver would need to be tested for COVID-19 before the trip.

Concerning the location of the matches, it was organized a division of the environments into four large zones, which did not have flow between them. Zone 1 is intended for the movement of players and the technical team. It is the space for the game itself, encompassing the field, the locker room, and the bench. In this zone, only 45 persons per club are allowed, and each one of them must be negatively tested for COVID-19 through the Reverse Transcriptase Polymerase Chain Reaction (RT-PCR) test. Zone 2, in turn, can’t exceed the established limit of 50 people, and it is restricted to cameramen, reporters, and ball boys. Zone 3, on the other hand, is intended for the interior of the stadium, where are located the hospitality area, tribune, and stands<sup>23</sup>. Additionally, zone 4, the most external area, is located on the outside of the stadium and contains the event transmission equipment and resources.

However, UEFA declares that at specific moments, such as the contact between players during matches, it is not possible to maintain minimum safety distances. Therefore, a rigorous testing protocol was established for all those involved in the performance of the games<sup>23</sup>.

The test used to control COVID-19 cases is the nasopharyngeal and oropharyngeal swab samples submitted to the RT-PCR test, to detect the presence of ribonucleic acid (RNA) from the SARS-CoV-2 virus<sup>23</sup>.

In UEFA championships, it is determined that visiting teams conduct these tests two or three days before the official match. The date is defined according to the time needed for the organization and dissemination of exam results. In addition, these teams must undergo retests on the day before each match, and the results must be announced no later than six hours before the official start of the event. For the home team, it is established that the tests are required two days before the match, and the results must be presented until the following day<sup>23</sup>.

The protocol served as a guideline for several competitions organized by UEFA, with emphasis on the Champions League, Europa League, and Women's Champions League, tournaments that had their configurations modified, intending to reduce the time between games and the number of matches. For both tournaments, venues were chosen for the games from the quarter-finals onwards: Lisbon, Portugal<sup>32</sup>; Gelsenkirchen, Dusseldorf, Duisburg, and Cologne, Germany<sup>33</sup>. Because of these decisions, the organization did not consider, as one of its measures, the mandatory isolation of the teams before the resumption of competitions<sup>23</sup>.

Regarding the management of confirmed cases of COVID-19, the organization defined that, from the moment the member receives confirmation of the positive test and the onset of symptoms, he must be immediately isolated in his hotel room and the situation must be communicated to local health authorities so that appropriate measures are taken. Those participants with suspected or confirmed mild and asymptomatic cases should also undergo the following tests and procedures: electrocardiogram, spirometry, and plethysmography. And, for moderate and severe cases, in addition to these tests and procedures, more detailed follow-ups involving other organs must be carried out<sup>23</sup>.

Finally, the guidelines regarding the moment of the game determine that the reserve bench must be allocated in the region of the stands to maintain a safe distance between the players, who do not need to wear protective masks during the game. Furthermore, championships must take place behind closed doors, without the presence of fans in the stadiums<sup>23</sup>.

The NBA protocol determined the resumption of the 2019-2020 season at the Walt Disney World complex in Orlando, Florida, the so-called "bubble". It counted on the presence of 22 teams, each having the right to take 17 players and the full coaching staff, having as a maximum value a total of 37 people per delegation<sup>29,30</sup>. It was also determined that the season would have a reduced number of games, with a shorter interval between them<sup>30</sup>.

The entire structure involves a wide organization that allows massive resources for those involved in the competition, which tries to avoid, as much as possible, their departure from the venue. It contributes to establishing a closed space with the least possible contact with the outside world. Inside the structure, the teams were divided into three hotels, and until the start of training and competitions, the interaction could only be made with members of the same accommodation, meeting in rooms was not allowed<sup>29</sup>.

The league further determined that all athletes and technical committees should be quarantined for 48 hours until they have two negative RT-PCR tests using nasopharyngeal and oropharyngeal swabs 24 hours apart. For this control during competition, the tests should be performed every night, and their results released in the following morning<sup>28</sup>.

If any participant tested positive, he would be directed to a place isolated from other players, the Isolation Housing, where he would have to do a re-test to confirm the diagnosis. The minimum time for this isolation would be seven days, and the player/manager should need to have two consecutive negative tests to be released. In addition, the "bubble" organization team also used video technology to track the contact of those individuals who tested positive. If for any reason, a participant needed to leave the "bubble", to be able to return, it would be necessary for him to be isolated for 10 days, as well as two negative results for the RT-PCR exam and confirmation of the presence of antibodies to the virus in their body<sup>29</sup>.

The NBA protocol also points out several rules and recommendations for a safe and healthy interaction: for players, it was advised to avoid touching their mouths and mouthguards, and meetings in rooms were prohibited, these only allowed in open areas, moreover, it was recommended the use of biometric devices in training and games to monitor vital signs and the constant use of a mask, except for moments of physical activity; for employees from other parts of the Walt Disney World complex, it was determined that they could not have contact with the members of the "bubble"<sup>28,29</sup>.

The CBF protocol was described as a "Medical guide of protective suggestions for returning to Brazilian football activities" and was prepared following the recommendations in force at the time of the World Health Organization (WHO), Ministry of Health of Brazil, the Federal Council of Medicine (CFM) and the Brazilian Medical Association (AMB)<sup>31</sup>.

In Brazilian football, 4 championships were played in the male category: series A, B, C, and D, which had a total of 128 clubs. In the women's category, 52 clubs competed in the A1 and A2 series. The resumption of activities in these tournaments was carried out in five phases: preliminary, individual or small group training, collective training, competition, and follow-up. All following the CBF recommendations and adequate to the specific policies of each state<sup>31</sup>.

The preliminary phase was defined as testing the players and the technical committee to assess whether the resumption was possible. The individual or small group training phase was carried out in the clubs' training spaces and consisted of athletes who in the first phase had negative tests for the virus. The collective training phase required a minimum distance of one (1) meter when not playing, constant hand hygiene, and technical meetings in open spaces. In the competition phase, the games were resumed without the presence of the fans, the stadium locker rooms were limited to indispensable employees. Everyone who was not playing had to wear masks and the doctors of each team had to send an epidemiological inquiry (with an emphasis on olfactory condition and temperature measurements) four hours before each game

with the results of all players. Finally, the follow-up phase was characterized as the analysis of the evolution of cases, including their treatment<sup>31</sup>.

The tests performed in the preliminary phase were the serology and RT-PCR, and the athlete who tested positive for class M immunoglobulin (IgM) or in the nasopharyngeal swab test (RT-PCR) was isolated for 14 days. The performance of these tests in the preliminary phase followed a schedule established by each medical department of each team, and this testing routine must be formalized to the CBF<sup>31</sup>. In the competition phase, it was not specified which tests should be performed in the epidemiological inquiries, but players who presented a body temperature above 37.5°C when they arrived at the stadiums would be isolated and followed up for testing and treatment. The frequency with which the tests must be performed was also not specified, being the responsibility of the medical committee of each team<sup>31</sup>.

It is remarkable that in this phase of competitions, the games were not restricted to just one location, but were done in the stadiums of teams with field command. Because of this, the matches took place in dispersed locations across the country, and, for this reason, different articulations were needed regarding the transport of the teams. For air travel, the main recommendation was to request authorization from the local airport authorities for loading and unloading, to avoid contact with other passengers. About land displacement, it was determined that it would take place by chartered buses, with the need to sanitize the vehicle before use. In addition, the use of personal protective equipment was mandatory<sup>31</sup>.

It is also verified that there were no changes about the time between matches, justified by the need to travel team building. There is a general guideline that at all stages, all those who are not performing physical activities should use protective masks and carry out hand hygiene regularly<sup>31</sup>.

## DISCUSSION

The data referring to the UEFA protocol (version 1) and the CBF were found in documents published on the official website of these institutions and, therefore, can be characterized as free and wide circulation<sup>23,31</sup>. However, the NBA protocol was broadcast differently, as it was restricted to the league itself, with no disclosure of the full document to the general public.

The isolation strategies of UEFA and NBA were similar, the NBA being more rigid and concentrated, and because of that, until the beginning of the 2019-2020 playoffs phase, there were no positive cases registered among the players in the complex<sup>34</sup>. The CBF strategy, on the other hand, generated greater exposure to the virus, and some teams had players who tested positive during the competition period<sup>35,36</sup>. Although the isolation method adopted by UEFA was not so restrictive, the choice of the

country to host the games was not arbitrary: the city of Lisbon, in Portugal, has the quality infrastructure to host a large sporting event, in addition to the fact that the fight against COVID-19 in the country has been one of the most efficient in Europe<sup>37</sup>.

Even with different player isolation policies, the three protocols shared guidelines and strategies about the times when players were not competing. Due to the “bubble” strategy, the NBA dealt, mainly, with orienting the teams regarding contamination in spaces and leisure moments outside the games and training. UEFA, in turn, emphasized the displacement of teams from hotels to stadiums, in addition to the use of pre-match concentration spaces. And CBF chose to separate the moments of recovery, without restricting the measures, since Brazil is a country of continental dimensions and the states were going through different scenarios in the fight against COVID-19.

A topic of divergence between the protocols that is worth highlighting is the duration of each one of them. That is, the CBF protocol, which proposed the structure for the organization of the complete season of Brazilian football, had a much longer duration, being valid in the period between June 2020 and February 2021<sup>31</sup>. The NBA protocol, in turn, lasted only the time necessary to finish the 2019-2020 season, which was three months<sup>28</sup>. However, it is noteworthy that of the 22 teams that entered the bubble, only two stayed throughout this period, considering that, as the other teams were eliminated from the competition, they left the venue<sup>38</sup>. The UEFA protocol, also to conclude the 2019-2020 season, initially lasted for two months<sup>39</sup>.

As for the mobility of players and technical committees, the UEFA and CBF protocols are quite specific for chartering buses for land travel<sup>23,31</sup>. These also state that the drivers must be tested for COVID-19 and the buses disinfected before and after travel. In the specific case of CBF, where air travel was necessary, there was no determination regarding the chartering of aircraft. However, the recommendations are hand hygiene and the use of masks throughout the trip. In the NBA protocol, due to the “bubble”, no displacement

Regarding testing protocols, the NBA and UEFA presented a stricter protocol, with the NBA being the strictest, requiring testing every day<sup>23,28</sup>. The CBF, on the other hand, established that each team should have its testing calendar<sup>31</sup>. However, there are similarities between the three protocols: before matches, teams must deliver the list of all players and employees with a negative RT-PCR test for SARS-CoV-2 and those who tested positive will be prevented from playing and isolated from the others<sup>23,28,31</sup>.

Thus, the measures proposed by UEFA and NBA seemed to be able to mitigate the contagion of COVID-19 among those involved, as they covered not only the matches but the entire competition process. In the Brazilian protocol, however, there was no travel limitation and reduced interaction with family members.

Furthermore, the option of reducing the time interval between championship matches also meets the ideas defined by Buldúa et al.<sup>40</sup>: “*The probability of a player being infected is greater during training than in the match since they are more exposed to physical contact with teammates during training*” (our translation). The CBF, which chose not to reduce the time between games, organized long-term championships, which increased the exposure of players and the coaching staff<sup>41</sup>.

It can be noted, therefore, that the role of medicine is not only related to the performance of tests for the diagnosis of COVID-19, but also to its fundamental participation in regulating the days between games, and in health education process<sup>40</sup>.

In particular, sports medicine can perform collaborative work, guiding institutions dedicated to the practice of sports concerning issues related to health at the organizational level and assisting athletes and the community about individual and collective behavior.

Therefore, a point to be highlighted concerns the reduction in the duration of competitions, since the reduction in the time interval between matches is essential to containing the spread of the virus<sup>42</sup>. Thinking about this process from a broader point of view, considering organizational models and preventive health measures, is an example of the possible contributions of sports medicine in the defense of life.

On the other hand, starting from a more restricted perspective and limited to a more individual dimension, it should also be considered that with reduced championships, players often need to train beyond their usual capabilities, which ends up characterizing what is called overtraining and thus generate damage to athletes. For Yuan et al.<sup>43</sup> “*more intense exercises have been shown to suppress the athlete’s immune system and depress their resistance to diseases*” (our translation).

However, it appears that the health and muscle integrity of the players do not constitute privileged aspects of the discussion of the protocols, with the measures being taken by the medical team of each club. Even so, considering the development of reference protocols that could be adapted to the reality of each team would be an interesting strategy and could have positive consequences in the safety process of sports return. Furthermore, it would somehow ensure that all players would have their needs

fully respected.

The data reveal that there is a tendency of sports institutions in preparing protocols, which instead of presenting broader guidelines, reduce the discussion to the issue of greater agility and credibility in testing for COVID-19 since one of its goals is the resumption of the events.

## CONCLUSION

When comparing the published protocols, it was found that there are three common guidelines disseminated by UEFA and NBA: (1) well-established pre and post-match participant isolation determinations; (2) frequent tests on all team members; (3) humanized and clear rules for separating those who test positive for the virus. Such guidelines were not clearly addressed by the protocol presented by the CBF, being at the discretion of each team.

It is noteworthy that all three protocols (UEFA, NBA, and CBF) converge in the following aspects: (1) holding the games without the presence of fans; (2) objective instructions for playing the games safely; (3) and the lack of new guidelines for maintaining the physical health of athletes. It can also be said that the measures adopted by the three organizations focus on controlling the transmission of the virus and on the safety of the entities involved.

It is necessary to emphasize that the analyzed protocols have their particularities because they deal with different sports (soccer and basketball), variable numbers of team members, and places where competitions take place, going through different moments in the COVID-19 pandemic. Furthermore, it is observed that the institutions were not prepared to face events related to the pandemic, in this case, COVID-19 and that the material produced is a reflection of the experienced process of recognition and adaptation.

Finally, it is possible to consider that sports medicine can successfully and cooperatively contribute to the process of resuming sports activities, helping in the development, review, and improvement of protocols in line with the different scenarios experienced during the COVID-19 pandemic, in order to ensure the integrity of athletes and all persons involved.

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