COVID-19 SAFETY RECOMMENDATIONS FOR THE REOPENING OF THE DR. JOAQUIM GRAVA CORINTHIANS TRAINING FACILITY



RECOMENDAÇÕES DE SEGURANÇA NA COVID-19 PARA A REABERTURA DO CT DR. JOAQUIM GRAVA DO CORINTHIANS

RECOMENDACIONES DE SEGURIDAD EN COVID-19 PARA LA REAPERTURA DEL CT DR. JOAQUIM GRAVA DE CORINTHIANS

Ana Carolina Ramos e Côrte¹ (Physician)

Joaquim Paulo Grava de Sousa¹ (Physician)

Ivan Furlan Grava de Sousa¹ (Physician)

Raquel Muarrek Garcia¹ (Physician)

Julio Stancati¹ (Physician)

1. S.C. Corinthians Paulista, São Paulo, SP, Brazil.

Correspondence:

Ana Carolina Ramos e Côrte Av. Dr. Gastão Vidigal, 1132, apto. 131 A. São Paulo, SP. Brazil. 05314-000. anacarolinacorte@gmail.com

ABSTRACT

Since December 2019, the world has been fighting the SARS-CoV2 virus (severe acute respiratory syndrome coronavirus 2). Little is known about vaccines and forms of treatment at this point. However, the importance of preventing transmission is very clear, and one of the main measures is social isolation. Major sports tournaments, including soccer championships, have been suspended or cancelled due to COVID-19, on the grounds of our understanding of the importance of social isolation. Accordingly, large clubs have handed over their stadiums for the construction of field hospitals, and have encouraged health care by providing guidance on hygiene and social distancing. The involvement of soccer in the prevention of this pandemic is due to the fact that its managers understand the importance of this sport in the process, and its influence on fans and players. Over the years, soccer has incorporated scientific and technological knowledge into the game, which has frequently served as a role model for other types of sport and for the population. Therefore, in these extreme times of the COVID-19 pandemic, there is no reason to believe it would be any different, and standpoints taken by soccer teams serve as an example and reiterate their role in the educational commitment to society and respect for government authorities. As a result, a protocol was drawn up for the resumption of training, in which all recommendations to be followed by players, managers/backroom staff and employees are in accordance with official health agencies of the national and international government. In other words, the resumption of training is subject to the authorization of government authorities. Level of evidence III; Descriptive study.

Keywords: SARS-CoV-2; Soccer; COVID-19.

RESUMO

Desde dezembro de 2019, o mundo vem lutando no combate ao vírus SARS-CoV2 (Severe acute respiratory syndrome coronavirus 2). Pouco ainda se sabe sobre formas de tratamento e a vacina. Porém, está muito clara a importância de prevenir a transmissão e, dentre as principais medidas, encontra-se o isolamento social. A partir da compreensão da importância do isolamento social, os principais torneios esportivos foram suspensos ou cancelados devido à COVID-19, inclusive os campeonatos de futebol. Com isso, grandes clubes cederam seus estádios para a construção de hospitais de campanha, além de incentivar os cuidados com a saúde por meio de orientações quanto a higiene e distanciamento social. O envolvimento do futebol na prevenção dessa pandemia acontece porque seus gestores compreendem a importância desse esporte no processo, assim como seu alcance sobre torcedores e praticantes. Com o decorrer dos anos, o futebol incorporou conhecimento científico e tecnológico à sua prática que, em diversos momentos, foi modelo para outras modalidades esportivas e para a população. Portanto, no momento dramático causado pela pandemia da COVID-19, não seria diferente, e as atitudes tomadas pelas equipes de futebol servem de modelo e reiteram seu papel no compromisso educacativo com a sociedade e o respeito às autoridades governamentais. Diante disso, foi elaborado um protocolo de retorno aos treinos, no qual todas as recomendações que devem ser seguidas pelos jogadores, pela comissão técnica e pelos funcionários estão de acordo com órgãos oficiais de saúde do governo nacional e mundial, ou seja, o retorno ao treinamento está sujeito à autorização das autoridades governamentais. Nível de evidência III; Estudo descritivo.

Descritores: SARS-CoV-2; Futebol; COVID-19.

RESUMEN

Desde diciembre de 2019, el mundo viene luchando en el combate al virus SARS-CoV2 (Severe acute respiratory syndrome coronavirus 2). Poco aún se sabe sobre las formas de tratamiento y la vacuna. Sin embargo, está muy clara la importancia de prevenir la transmisión y, entre las principales medidas, se encuentra el aislamiento social. A partir de la comprensión de la importancia del aislamiento social, los principales torneos deportivos fueron suspendidos o cancelados debido a la COVID-19, inclusive los campeonatos de fútbol. Con eso, los grandes clubes cedieron sus estadios para la construcción de hospitales de campaña, además de incentivar los cuidados con la salud por medio



de orientaciones sobre higiene y aislamiento social. La participación del fútbol en la prevención de esta pandemia ocurre porque sus gestores comprenden la importancia de este deporte en el proceso, así como su alcance sobre aficionados y practicantes. Con el transcurso de los años, el fútbol incorporó conocimiento científico y tecnológico a su práctica que, en diversos momentos, fue modelo para otras modalidades deportivas y para la población. Por lo tanto, en el momento dramático causado por la pandemia de COVID-19, no sería diferente, y las actitudes tomadas por los equipos de fútbol sirven de modelo y reiteran su papel en el compromiso educativo con la sociedad y el respeto a las autoridades gubernamentales. Delante de eso, fue elaborado un protocolo de retorno a los entrenamientos, en el cual todas las recomendaciones que deben ser seguidas por los jugadores, por la comisión técnica y por los funcionarios están de acuerdo con los órganos oficiales de salud del gobierno nacional y mundial, o sea, el retorno al entrenamiento está sujeto a la autorización de las autoridades gubernamentales. **Nivel de evidencia III; Estudio Descriptivo.**

Descriptores: SRAG-CoV-2; Fútbol; COVID-19.

DOI: http://dx.doi.org/10.1590/1517-8692202026052019_0044

Article received on 05/16/2020 accepted on 07/13/2020

REPERCUSSIONS OF COVID-19 ON SPORT

The first confirmed case of COVID-19 emerged in December 2019 in the city of Wuhan, China.¹ Since then, the world has been fighting against the SARS-CoV-2 virus. Little is known about vaccines and forms of treatment at this point.¹ However, the importance of preventing transmission is very clear, and one of the main measures is social isolation.¹

In the world of sports, although athletes are younger and have fewer comorbidities than the general population, and are therefore at lower risk of severe disease or death, it is also necessary to reduce the transmission of COVID-19 to protect those at greater risk of dying,^{2,3,4} and to delay the pandemic so that health care is available to everyone.

Major sports tournaments have been suspended or cancelled due to COVID-19 since early March 2020, on the grounds of our understanding of the importance of social isolation. ^{1,4} Initially, some sporting events were held without spectators to reduce transmission through close contact between fans. Soccer championships were aborted, Formula 1 circuits were suspended, the American basketball league (NBA) postponed the season, other sporting events were forced to cancel when local and state governments placed restrictions on large gatherings, and on March 24, 2020, the International Olympic Committee announced that the Tokyo 2020 Olympic and Paralympic Games would be postponed until July 2021.

IMPORTANCE OF SOCCER TO SOCIETY

Soccer is one of the most popular sports in the world, hence a large part of the global population shows significant interest in competitions held in several countries. In these times of pandemic, as soccer is a sport with worldwide reach, it should serve as an example due to its considerable relevance. Large clubs have handed over their stadiums for the construction of field hospitals, and have encouraged health care by providing guidance on hygiene and social distancing. Soccer understands its importance in this process and its influence on fans and players.

Available research describes soccer as a sport that is unique in the world, due to its particular characteristics. During a soccer match, players face different demands, mainly due to the peculiarity of their playing positions. In addition, the competitive performance of soccer during the match requires players to master the technical and tactical skills of the game under high physical and mental stress. Therefore, soccer players need to achieve high levels of fitness to allow specific adaptations during training sessions, which must be taken into consideration when resuming activities and competitions.

Due to its global popularity, soccer has incorporated scientific and technological knowledge into the game,⁹ which has frequently served as a role model for other types of sport and for the general population. Therefore, in these extreme times of the COVID-19

pandemic, there is no reason to believe it would be any different, and standpoints taken by soccer teams will serve as an example, recognizing their role in the educational commitment to society and respect for government authorities.

However, the reopening of the training facility to reintegrate athletes, management/backroom staff and employees must follow specific soccer-related recommendations. Therefore, a protocol is needed to minimize the risks of contamination, despite the fact that the priority, at this time, is the health of the athletes, their families, and their communities.

PREVENTION OBJECTIVE

Since most athletes are not in the high risk group, and are in top physical shape, they may not display clinical symptoms of COVID-19, or instead display only mild symptoms. Despite the lesser likelihood of developing severe symptoms, athletes are also potential carriers of the disease, if infected with coronavirus. Thus, the prevention of COVID-19 is also important for the competitive athlete, in order to minimize training disruptions and the potential adverse effects on the respiratory tract and aerobic capacity in the short and long term. ¹⁰ Therefore, prevention strategies are necessary.

As a result, a protocol was drawn up for the resumption of training, in which all recommendations to be followed by players, managers/backroom staff and employees are in accordance with official health agencies of the national and international government, always bearing in mind that the resumption of training is subject to government authorization.

Reopening protocol of the Centro de Excelência e Treinamento de Futebol Dr. Joaquim Grava (Dr. Joaquim Grava Center for Soccer Excellence and Training)

Understanding the current situation we are experiencing with the COVID-19 pandemic, Sport Club Corinthians Paulista has made a commitment to players, managers/backroom staff and everyone involved with soccer, to follow the guidelines and recommendations of official health agencies, focusing on care in the control and curtailment of the disease.

Some measures will be taken during the pandemic period

The participation of the player or any other person involved with soccer must satisfy the inclusion criteria⁴ set out below:

- Not have shown any sign or symptom of COVID-19 in the last 14 days.
- Not have been in close contact with any person with COVID-19 symptoms, with or without a confirmatory test, in the last 14 days.

Stage 1: At home - Before resuming training sessions

1. All athletes, managers/backroom staff and employees of the training facility will undergo serology testing for COVID-19 (about 48 hours prior

to arrival for the 1st training session) to identify immune and nonimmune people. The serology tests may be repeated according to the results, or due to necessity detected by the medical department. In addition, these individuals will undergo the RT-PCR test prior to their return.

During activities, individuals who display symptoms, or those for whom testing is deemed necessary, will undergo the RT-PCR test.⁴ 2. Athletes who are IgG positive will undergo an assessment performed by the medical team of S.C. Corinthians Paulista, which will include a cardiopulmonary assessment to identify possible changes in lung function caused by coronavirus as well as laboratory tests, including D-dimer, ferritin and LDH for better evaluation and clinical follow-up.¹⁰

Knowing the serology test results of the players, managers/backroom staff and club employees is important for transmission control measures, the planning of training and workgroups, and medical monitoring with the necessary assessments and treatment for patients who have the disease.

Stage 2: Leaving home

- 3. Wash your hands thoroughly with soap and water. Keep hand sanitizer (alcohol gel) in the car.
- 4. Drive from your home to the training facility without stopping anywhere. If you absolutely have to stop, keep a 2 meter distance from others, and do not touch anything that does not belong to you.
- 5. Wear a mask (cloth or TNT) while traveling from your home to the club. Guidelines on hand hygiene and the use of masks for individual protection and also to minimize transmission are in accordance with the guidelines of the Brazilian Ministry of Health.⁴

The risk of infection on public transport is known to be high, according to the Ministry of Health.⁴ (Figure 1)

Places with transmission risk - COVID-19 HIGH Hospitals **Public transport** Banks and betting kiosks **Elevators** Movie theaters **Fitness** centers/gyms Street markets Supermarkets Restaurants Medical offices Drugstores Streets Private vehicles low Residence #ficaemcasa #mascaraparatodos #todoscontraocoronavirus

Figure 1. Places with transmission risk - COVID-19.

Stage 3: Arriving at the training facility

- 6. Before getting out of the car, clean your hands with alcohol gel.
- 7. Only take essentials with you when leaving the car (leave your cell phone and glasses, for example, in the car).
- 8. Do not greet anyone with a hug, kiss, or handshake.
- 9. All people entering the training facility will have their body temperatures taken by a thermal imaging camera. If the temperature is higher than 37.2°C the physician will proceed as required.
- 10. Players will not have access to the locker room, laundry room, weight training/physical therapy room, R9 laboratory or medical department. They will arrive at the training facility and go straight to the training ground, already wearing their uniforms.
- 11. Players will receive their training uniform kits on the first day and will wash/clean them at home.

It is advisable to take only essentials with you when leaving your car in order to reduce the transmission of coronavirus, since it is known that the virus can be transmitted directly through water droplets from saliva, expelled when a person coughs, for instance. Indirect transmission, on the other hand, occurs through contact with infected surfaces followed by contact with the hand, eyes, or nose. It is known that the virus can stay alive on surfaces for hours or days.¹¹

In view of the above, recommendations such as: only taking essentials with you when getting out of the car, reducing gatherings of people in the same space, e.g., restricting access to the locker room, laundry room, weight training room and other environments, and not greeting others with a hug, kiss or hand shake, are necessary.

One of the first and most notable symptoms of COVID-19 is fever;⁴ therefore, taking a person's temperature serves to identify a symptom that may be related to the disease at an early stage.

Stage 4: During the training session

- 12. During training sessions participants are required to use their own water and isotonic drink bottles and must not share them. Other utensils, such as towels and vests, must be reserved for individual use.
- 13. Training sessions will take place in small groups of 6-8 players, on different pitches, according to the schedule of the managers/backroom staff and of the medical department. Group composition tends to be the same in all training sessions, but may change depending on the test results. 14. The backroom/coaching staff must keep a minimum distance of 2m between them.
- 15. In the presence of any clinical or orthopedic complaint, the player will be referred to the medical department and assessed by the club's physician.

The purpose of assigning players to smaller groups distributed around different pitches and keeping a minimum distance of 2m between members of the backroom/coaching staff is to achieve social distancing, guidance provided by the Ministry of Health.

Stage 5: After the training session

- 16. Wash your hands thoroughly.
- 17. Take materials used during the training session (towel, soccer boots, shin guards, and water bottle) home with you.
- 18. Only players who need physical therapy or the weight training room for treatment will be directed to the sector. The therapy/weight training location will always be cleaned after treatment with 70% alcohol, hydrogen peroxide or quaternary ammonium, on all surfaces.
- 19. The members of the medical department and physical therapy team will use PPE.
- 20. The players or members of the coaching/backroom staff who need medical care or physical therapy will have to wear masks while walking around the premises.

- 21. All recovery proposals will be carried out at home under the guidance of the physical therapists.
- 22. There will be no meals of any kind at the training facility.
- 23. People who are not involved in the work are prohibited from entering the premises of the Training Facility.
- 24. Get in your vehicle and drive straight home.

The post-training period is very important for making sure the environment is clean. Therefore it is essential that athletes take their belongings and uniform home to be washed/cleaned. This guidance serves to reduce contamination of the environment by the virus.^{12,13}

Soccer is a sport in which injuries ^{14,15} occur due to its characteristic intensity and physical overload, and because of trauma. Thus, injuries can happen even with all the necessary precautions, and on this occasion, the athlete will be referred to the care of the medical team, and will undergo an individual assessment. It is important to remember that health professionals involved with the injured athlete should always use PPE (mask, gloves, goggles) while accompanying the patient. Non-emergency care such as post-workout recovery measures will be supervised and carried out at home.

Reducing the movement of people not directly involved in the work follows the recommendation given by the WHO on the restriction of

gatherings. The fewer people there are on the premises, the easier the control of transmission and the disinfection of the site.

Stage 6: Arriving home

25. Remove your clothing and put it in the washing machine. Take a bath/shower. Do not touch anything or anyone before your bath/shower. 26. The social isolation guidance, according to the Ministry of Health, must be respected outside the work environment.

Final guidelines

- 27. Measures such as hand hygiene and the use of alcohol gel sanitizer must be followed in accordance with the guidance of the Ministry of Health.⁴
- 28. At-risk groups will refrain from engaging in training facility activities: individuals aged over 60 years and those with chronic diseases.^{1,4}

The measures are needed to reduce the number of people at the training facility, while protecting players, coaching/backroom staff and others involved in soccer and their families.

All authors declare no potential conflict of interest related to this article.

AUTHORS' CONTRIBUTIONS: Each author made significant individual contributions to this manuscript. ACRC: writing and intellectual concept; JPGS: essential contribution to the conception of the article; IFGS: writing; RMG: critical review of the content; JS: intellectual concept. All authors read and approved the final version of the article.

REFERENCES

- Centers for Disease Control and Prevention. Information for Healthcare Professionals about Coronavirus (Covid-19). [Internet]. [access on April 10, 2020]. Available at: https://www.cdc.gov/ coronavirus/2019-nCoV/hcp/index.html
- Guan WJ, Ni ZY, Hu Y, Liang WH, Ou CQ, He JX, et al. Clinical Characteristics of Coronavirus Disease 2019 in China. N Engl J Med. 2020;382(18):1708-20.
- Chen N, Zhou M, Dong X, Qu J, Gong F, Han Y, et al. Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study. Lancet 2020;395(10223):507-13.
- 4. Brazil. Ministry of Health. Health Surveillance Department. Guia de vigilância epidemiológica emergência de saúde pública de importância nacional pela doença pelo coronavírus 2019. Brasília: Ministry of Health. [Internet]. 2020 [access on April 3, 2020]. Available at: https://www.saude.gov. br/images/af_gvs_coronavirus_6ago20_ajustes-finais-2.pdf
- Cohen M, Abdalla RJ, Ejnisman B, Amaro JT. Lesões ortopédicas no futebol. Rev Bras Ortop. 1997;32(12):940-44.
- Schultz JC, Castilhos R, Fajardo AA, Grbac B, Chatzidakis A, Nill A, et al. The FIFA World Cup: analyses and interpretations of the world's biggest sporting spectacle. In: Shultz C, Benton R, Kravets O, Editors. Marketing as Provisioning Technology: integrating perspectives on solutions for sustainability, prosperity, and social justice. Proceedings of the 40th annual macromarketing conference. Chicago, IL, USA, Micromarketing Society: Laramie, WY, USA, 2015; pp. 303-305.
- 7. Lago-Peñas C, Lago-Ballesteros J, Dellal A, Gomez M. Game-Related Statistics that Discriminated

- Winning, Drawing and Losing Teams from the Spanish Soccer League. J Sports Sci Med. 2010;9(2):288-93.
- laia FM, Rampinini E, Bangsbo J. High-intensity training in football. Int J Sports Physiol Perform. 2009;4(3):291-306.
- Ehrmann FE, Duncan CS, Sindhusake D, Franzsen WN, Greene DA. GPS and injury prevention in professional soccer. J Strength Cond Res. 2016;30(2):360-7.
- 10. Baggish A, Drezner JA, Kim J, Martinez M, Prutkin JM. The resurgence of sport in the wake of COVID-19: cardiac considerations in competitive athletes. Br J Sports Med. 2020-102516.
- 11. Kampf G, Todt D, Pfaender S, Steinmann E. Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents. J Hosp Infect. 2020;104(3):246-51.
- 12. Finnoff J. Return to Training Considerations Post-COVID-19 United States Olympic & Paralympic Committee. Usopc Sports Med. [Internet]. 2020 [access on April 28, 2020]. Available at: https://www.acsm.org/docs/default-source/covid-19-reopening-resources/usopc-return-to-training-considerations---v3.pdf?sfvrsn=ca722e53_2
- 13. Larcom AB. 18 Safety considerations for your health club reopening plan. [Internet]. 2020 [acesso em 22 de abril de 2020]. Disponível em: https://www.ihrsa.org/improve-your-club/safety-considerations-for-your-health-club-reopening-plan/
- Ekstrand J, Hägglund M, Waldén M. Epidemiology of muscle injuries in professional football (soccer). Am J Sports Med. 2011;39(6):1226-32.
- Andersen TE, Tenga A, Engebretsen L, Bahr R. Video analysis of injuries and incidents in Norwegian professional football. Br J Sports Med 2004;38(5):626-31.