The Present State of Medical Support System in Football and Efforts Directed at Tokyo 2020

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The International Federation of Football Association (FIFA) and Japan Football Association (JFA) are attempting various measures for football players to play in a better environment. However, in Europe, for two consecutive days in May 2016, two professional football players collapsed and died on the pitch, and the ongoing incidents of heatstroke associated with global warming are an undeniable reality. Tokyo 2020 will take place during hot summer weather, medical safety measures aimed at making Japan safe not only for athletes but also for people visiting from abroad are a matter of urgency. Here, we will discuss the present state of the medical support system of the JFA Medical Committee and efforts dedicated to Tokyo 2020.

Key words: soccer, medical committee, Japan Football Association (JFA)

Introduction

To demonstrate athletes’ full potential, setting up and organizing various support systems are necessary. Particularly, establishing medical support systems is extremely important to protect athletes from injuries. When we look at the history of medical support systems in football1)-4), during the 1964 Tokyo Olympics held more than half a century ago, JFA deployed a medical team consisting of six doctors, and their main role was ”management of medical matters at the venue” but supporting the national teams (athletes) was not included. In the sixth Asian Games held in 1970, doctors accompanied the Japanese national team for the first time. After the game in 1977, when a medical system was introduced in JFA, ”the JFA Medical Affairs Committee” was established. Nearly forty years since then, the JFA Medical Affairs Committee had been working on developing a domestic medical support system. With following the designation by FIFA, the JFA medical Affairs was renamed ”Sports Medical Committee” in 1992 and “Medical Committee” in 2014.

With regard to the 2020 Tokyo Olympic and Paralympic Games, the Organizing Committee for the Olympic Games suggested that even after the conclusion of the Olympic Games the sporting venues will serve as hubs of sports and entertainment facilities, which is their ”tangible legacy”, while making sports more popular and society healthier and more vibrant, which is their ”intangible legacy”. However, as Tokyo 2020 will be held during hot summer weather, how it will affect not only the athletes’ but also the audience’s health is seriously concerned. Therefore, countermeasures need to be arranged urgently.

Here, we will discuss the present state of the medical support system5) of the JFA Medical Committee and efforts6) dedicated to Tokyo 2020.
The Organization of the Medical Committee

The Medical Committee is one of the nine standing committees within JFA. The committee consists of experts that oversee medical affairs (Figure-1). Internationally, it is under the umbrella of the FIFA Medical Committee and Asian Football Confederational (AFC) Medical Committee. In Japan, it provides guidances to the medical committees of 47 prefectural football associations, JFA Athletic Trainers’ Association, J-League Trainers’ Association, etc. (Figure-2). There are three specialized subcommittees within the committee: “Anti-Doping Subcommittee”, “J-League Team Doctors’ Subcommittee” and “Nutrition Support Subcommittee”. Furthermore, the “Sports Lifesaving Project”, which is in charge of the Basic Life Support (BLS) course, and “Research and Exploration Working Group”, which is in charge of surveillance, etc., are also a part of the committee.

The Medical Committee consists of ten members, which includes six orthopedic surgeons, two doctors

Figure-1  The organizational chart of JFA

Figure-2  The chart of organizations related to JFA
of internal medicine, one neurosurgeon and one athletic trainer. Generally, the committee holds monthly meetings attended by the heads of the JFA Technical Department (4 persons), the National Team Department (1 person), the Futsal and the Beach Football Department (1 person) as well as the J-League Competition and Administration Department (1 person) in addition to the ten members of the committee.

Roles of the Medical Committee

The Medical Committee is an agency that oversees all of the JFA departments (including those related to trainers) pertaining to medical affairs, and although their content is diverse, JFA’s rules and regulations specify the following as matters that fall under the Medical Committee’s control.

1) Athletes’ health management, injury prevention and emergency measures
2) Anti-doping control
3) Management of medical affairs pertaining to the national team
4) Educating players, coaches, and trainers about all of the above
5) Management of medical affairs during games and tournaments hosted by JFA
6) All other medical and healthcare matters

Activities of the Committee

1. Dispatching doctors and athletic trainers for the Japanese national teams

The Medical Committee appoints the doctors and athletic trainers accompanying the national teams, and it also dispatches them to the such top teams such as Japan’s men’s national football team (Samurai Blue) and women’s national football team (Nadeshiko Japan), Japan’s national Olympic football team, national youth football teams, and national futsal and beach football teams.

Each team is accompanied by 2 – 3 travelling doctors and they accompany the teams from the moment they set off for the World Cup up until the end of matches in each category. Furthermore, JFA conducts training activities at training centers in nine areas across the nation and strives to promote football and nurture young players. It dispatches doctors and trainers to each training center in cooperation with the medical committees of the 47 prefectural football associations. The travelling doctors must submit a report within two weeks after the end of the activities, and the Medical Committee identifies issues by reviewing the reports and plans countermeasures.

In the J-League, since 1993, team doctors and athletic trainers (generally authorized by the Japan Sports Association) have been required to accompany teams during all official games. Article 52 (“Players’ Health Management and Doctors”) of J-League’s rules and regulations provides that “Doctors holding Japanese medical license shall be appointed to each J-Club exclusively, and it is the clubs’ responsibility to manage their players’ health.”

2. Medical check-ups and reports

Since 2010, FIFA has obliged all players participating in the World Cup to submit PCMA (pre-competition medical assessment: Figure-3) regardless of the category, to eradicate sudden deaths of players. In cooperation with the Japan Institute of Sports Sciences (JISS), the Medical Committee conducts PCMA of Japan’s national team players, and the PCMA form, which consists of 15 pages, requires detailed medical examination and reports centered on medical check-ups by a general physician, orthopaedic examination, electrocardiography, echocardiography, etc.

Since 1993, all registered J-League players must undergo medical check-ups (Figure-4) and the medical reports must be submitted once a year. The Medical Committee provides guidance and offers counsel regarding the medical treatment of players with medical abnormalities. Furthermore, since 2011, prophylactic vaccinations, which are recommended by FIFA for four types of infectious diseases (hepatitis A, hepatitis B, tetanus, measles), have been mandatory. To eliminate unnecessary vaccination, the secretariat of the J-League collectively manages players’ vaccination history and antibody titers.

To manage players’ health consistently, the Medical Committee gives out the Football Health Mate (medical records of football players: Figure-5, 6) to Japan’s national football team players and J-League players in each category. The players
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Figure 4  J-League medical check-up report

Figure 5  Football health mate
must have the Health Mate on them for each activity. In the Health Mate, everything related to players’ medical records, which includes the results of medical check-ups, past medical history of injuries and disorders, current medical history, vaccination records must be written down and even if a player is transferred, their medical records are not discontinued and therefore, continuous follow-ups have achieved. Currently, the Medical Committee is considering creating an electronic version of the Health Mate. Moreover, since 2012, all registered players of Nadeshiko League, JFL and F-League also must undergo medical check-ups. In December 2010, medical check-ups centered on questionnaires were introduced for all registered players of teams participating in national senior high school football championships.

3. Injury Report

In the J-League, the submission of “J-League Injury Report” (Figure-7) regarding injuries sustained during official J-League matches has been mandatory since 1993. The reports must be submitted promptly after the end of a game, and the subjects are the players who are expected to take at least one week to return to play.

Since 2010, submitting an “Injury Report” of the players in the Nadeshiko League and F-League has been mandatory and gender differences between men and women and the characteristics of futsal have also been studied.

4. Organization and approval of doctor-trainer seminars and conferences

Seminars and conferences directly organized by the Medical Committee include football doctor seminars and conferences which are attended by the chairmen of the 47 prefectural medical committees. The first football doctor seminar was held in 1981. A total of sixty-two seminars have been held by March 2018. The qualification for participation is a doctor (dentist) with a strong interest in football and sports medicine. The seminars are held twice a year for two days and one night. In the seminars, after giving presentations by doctors who have accompanied Japan’s national football teams, the participants engage in football training (a football game). Doctors who have taken part in at least four seminars can be qualified as a doctor accompanying Japan’s national football teams or as a doctor dispatched for training center activities. The first nationwide conference of the 47 prefectural medical
committees’ chairmen was held in 2010. The objectives of the conferences are to vitalize prefectural medical committees and communicate the thoughts and intentions of JFA and the 47 prefectural football associations.

5. Doping control and anti-doping activities

In March 1995, doping control was introduced in the J-League. The J-League Doping Control Committee has conducted anti-doping control specialized for football under the guidance of FIFA until 2008. After the JFA partnered with the Japan Anti-Doping Agency (JADA) in 2009, doping control has been carried out by JADA.

Besides the J-League, doping control has been carried out in the Nadeshiko League, the F-League and also in the Emperor’s Cup.

In addition to providing anti-doping education to the players of the J-League, Nadeshiko League and F-League, the “Anti-Doping Subcommittee” of the Medical Committee has also concentrated their efforts on providing the education (including dietary education) to Japan’s national football team players of each category, especially for young players.

6. The spread of football medicine

To spread the knowledge of football-related sports medicine, in addition to creating a medical information section on the official website of JFA, the committee published a “Textbook of Football Medicine for Coaches and Players” in 2011, which is also used as a textbook for instructor training courses. The medical information section consists of two parts: one is for players and coaches, and another is for the healthcare professionals.

7. International cooperation

FIFA selects medical facilities with a specific function, which is accredited as FIFA Medical Centers of Excellence (FMCE). Medical facilities that have been accredited as FMCE in Japan are listed below:

- JISS and Juntendo Hospital (two jointly accredited facilities)
- St. Marianna Medical School
- Kobe University Hospital, Hyogo Prefectural Rehabilitation Central Hospital and Meiwa Hospital, which are three jointly accredited facilities.
Efforts toward Tokyo 2020

1. Countermeasures against heatstroke

The committee created a "Guide to Dealing with Heat in Football" in June 1997 and has cautioned against heatstroke. However, due to global warming, summer heat wave, the temperature above 35°C, has been increased fourfold since 1997 when the guide was introduced. Considering that Tokyo 2020 will take place amid extreme summer heat, "Guidelines for Measures against Heat Stroke" were created in March 2016 to protect the whole football family including players, staff, referees, and people in attendance. According to these guidelines, if the wet-bulb globe temperature (WBGT) exceeds 31°C, continuous pitch-side presence of "either doctors, nurses or person qualified to provide basic life support (BLS)" is mandatory.

2. Sports Lifesaving Course (BLS course)

FIFA mandates medical check-ups at events hosted by FIFA to prevent sudden death on the pitch. However, in Europe, for two consecutive days in May 2016, two professional football players died collapsing on the pitch, which indicated that medical check-ups alone could not prevent sudden deaths and reconfirmed the importance of basic life support on the football pitch.

Furthermore, as Tokyo 2020 will take place during hot summer weather, medical safety measures aimed at making Japan safe not only for athletes but also for people visiting from abroad are a matter of urgency.

JFA Medical Committee launched the "Sports Lifesaving Project" in June 2017 with the purpose of preparing more first responders who will be able to provide basic life support. In January 2017, it conducted the first Sports Lifesaving Course (BLS course), which is currently planned to be conducted nationwide.

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