Efforts to Deal with Allergic Diseases at School in Japan


Takashi ETO*1

Introduction

It is not rare to encounter children with allergic diseases in daily school life. In Japan, there are some surveys indicating that the number of school children with allergic diseases is increasing recently. Allergic diseases are characterized by the necessity of long-term control and can be even life-threatening in some cases. Teaching and guidance at school always require close attention, and it is necessary that each teacher has an accurate knowledge of the characteristics of the allergic diseases children might have and understands the points that require attention when teaching.

In the past, Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan has been making efforts in creating and promoting documents such as “Q&As on atopic dermatitis in school life” and “Health management manual for school children with asthma.” Upon conducting surveys on allergic diseases in school life to understand the actual situation and efforts by schools, the MEXT established a special committee at Japanese Society of School Health, developed “School Life Management and Guidance Form (for Allergic Diseases),” and distributed the “Efforts to deal with allergic diseases at school: Guidelines” to schools and others.1

At the workshop for school physicians held by Japan Medical Association in Fiscal Year (FY) 2007, the symposium “Allergic diseases at schools: Support and management” brought much lively discussions.2–5 Since FY 2008, a program was launched to deal with students with allergic diseases based on a physician’s diagnosis. Here I will explain the steps to take to ensure the solid operation of the program in Japanese school system.

Current Situation and Measures for Allergic Diseases in Students

In FY 2004, MEXT conducted a nationwide survey in public elementary, middle and high schools (total 36,830 schools) as preparation for developing measures against allergic diseases at school. In this survey, students’ situations and the actions taken at each school were investigated for asthma, atopic dermatitis, allergic rhinitis, allergic conjunctivitis, food allergy, and anaphylaxis. The results were summarized and disclosed at the end of FY 2006. The overview of this report is available online.

The survey found that allergic diseases are not rare in school children, and thus situations call for the actions by school health system be made under the premises that various allergic diseases exist among children in any class or school. It was also found necessary to further promote the efforts to deal with allergic diseases at school in order to make school a safe and secure learning place for all students (Figs. 1–6).

Development of “Efforts to Deal with Allergic Diseases at School: Guidelines”

Based on the above described surveillance study by MEXT, the committee to promote and examine efforts to deal with allergic diseases at school (hereafter the Committee) was established at Japanese Society of School Health in FY 2007.

*1 Professor, Graduate School of Education, The University of Tokyo, Tokyo, Japan (as of March 2010) (eto-t@umin.net). This article is a revised English version of a paper originally published in the Journal of the Japan Medical Association (Vol.138, No.4 Suppl, 2009, pages 34–39). The original paper is based on a lecture presented at FY 2008 Workshop for School Physicians, held at the JMA Hall on February 21, 2009.
After about 10 months of discussions, “Efforts to deal with allergic diseases at school: Guidelines” (hereafter Guidelines) and “School Life Management and Guidance Form (for Allergic Diseases)” (hereafter the Allergy Form) were developed (Fig. 7). Now I will explain how to utilize these materials in the health guidance and management of students with allergic diseases.

**Basic idea behind the efforts**

Based on the MEXT’s study results, two issues were raised to promote efforts to deal with allergic diseases at school: 1) a system should be created to ensure that the actions taken for individual students are based on instructions by physicians, and 2) various school efforts that are based on medical evidence should be made in a safe, reliable, and efficient manner.

The conclusion of the Committee was that, based on the current status of the efforts in dealing with allergic diseases at school, the future plans should include the education for school staff on the accurate knowledge of allergic diseases. The Committee also proposed to create a system to ensure that school’s actions would be based on the medical evidence in a safe, reliable,
The Committee also discussed the development of School Life Management and Guidance Form that is specifically prepared for allergic diseases as a tool to help the school efforts. The original School Life Management and Guidance Form is a single-page form in A4-size (similar to letter-size), which had been used in schools for the purpose of physician-to-school communication. The form specifies the physician’s instructions regarding exercise restriction or acceptable level of exercise, and it is mainly used for children whose physical activities must be restricted due to diseases (heart disease, kidney disease, etc.). It and efficient manner.

More than 95% of schools were making efforts to grasp the situation of atopic dermatitis among students. Only 46.2% of schools were making considerations for participation in gym classes and sports events. Aggravation factors for atopic dermatitis include sweat, ultraviolet rays, and disinfectant in swimming pool. It is important that school staff fully understand such basic knowledge so that appropriate considerations will be made when necessary. Only 14.8% of schools were equipped with a hot-water shower.

Fig. 3 Efforts to deal with atopic dermatitis

More than 95% of schools were making efforts to grasp the situation of atopic dermatitis among students. Only 46.2% of schools were making considerations for participation in gym classes and sports events. Aggravation factors for atopic dermatitis include sweat, ultraviolet rays, and disinfectant in swimming pool. It is important that school staff fully understand such basic knowledge so that appropriate considerations will be made when necessary. Only 14.8% of schools were equipped with a hot-water shower.

Fig. 4 Efforts to deal with allergic rhinitis and conjunctivitis

Only about 80% of schools were making efforts to grasp the situation of allergic rhinitis and conjunctivitis among students. The percentages of schools that were making considerations for clean-up duties (including animal care duty) or other possibly aggravating activities were only 15% and 29.4%, respectively. It is necessary to promote the understanding among school staff on the characteristics and specific considerations recommended for these diseases. Students with these diseases are likely to require self-management even after they reach adulthood. Schools are strongly advised to assist each student to develop self-management ability without limiting opportunities to participate in daily school activities and classes as much as possible.
This form was adopted for students with allergic diseases as the Allergy Form (formally called the School Life Management and Guidance Form (for Allergic Diseases)), in order to communicate the physician’s instructions to school properly. The Allergy Form, which includes information on types and levels of allergic diseases a student has and the specific instructions from his/her physicians, is also expected to help school to realize its various efforts practically by establishing a system to utilize it in future. At the same time, an operational manual has been prepared for schools, parents, and physicians.

**Fig. 5 Efforts to deal with food allergy**

More than 95% of schools were making efforts to grasp the situation of food allergy among students. Only 51.9% of schools were making efforts to prepare for an emergency. More than 80% of schools were adjusting the school meals to deal with food allergies. 77.2% of schools were making considerations for school trips with sleepovers.

**Fig. 6 Efforts to deal with anaphylaxis**

More than 95% of schools were making efforts to grasp the situation of anaphylaxis among students. A future issue will be to acquire more detailed information that can contribute to school efforts. Only 65.2% of schools were preparing for emergency. Anaphylaxis is a rare but severe disease that is life-threatening when occurs. Considering there have been cases that a very first episode for a student happened while at school, all schools should share the information on the causes and symptoms and have common understanding on the actions to be taken at the time of onset. Only 12.8% of schools had a designated place to store medicine.
Fig. 7 School Life Management and Guidance Form (for Allergic Diseases) (“Allergy Form”)
describing the points to consider according to each role (Fig. 7).

Management and guidance using School Life Management and Guidance Form (for Allergic Diseases)

First, schools and school boards should identify students with allergic disease and request their guardians to submit the Allergy Form. If the parents wish to participate, they are to have it filled out by the child’s physician(s) and/or school physician before being submitted to the school. Based on the submitted Allergy Form, the school will discuss with the guardians and implement actions.

The Allergy Form is a two-sided, single sheet form, designed to describe major allergic diseases of a given student. The school will archive the submitted forms for all school staff to access in the case of an emergency, while taking reasonable precautions to protect the students’ personal information. The form shall be submitted every year (or more frequently) by each relevant student for as long as his/her allergic condition requires the school’s considerations and management, even if the symptoms and other information remain unchanged. The physician should complete the Allergy Form with all details foreseen for the next 12 months, including possible changes in symptoms, treatments, and the instructions for considerations in school life. Exceptions apply when the medical conditions change significantly. For students with food allergy require special care in school meals and others, parents are requested to provide additional information in details, which will be used comprehensively along with the Allergy Form.

Conclusion

The management and guidance program using the Allergy Form just started in FY 2008, and schools and communities have not fully comprehended it yet. At present, it is considered to be in the dissemination period. The Guidelines describe the points when dealing with allergic diseases, including the storing of emergency medications at school (including EpiPen®) and hot-water shower for students with atopic dermatitis. The Guidelines are yet to be tested through the course of implementation at school, and problems may rise at actual scenes that must be discussed in the future. Nevertheless, the Guidelines have significant meaning as the first step towards a standard management system for allergic diseases at school.

As the next steps, activities such as preparing the Q&A will be important to promote better understanding among the public on how allergic diseases are to be managed in school life. The Committee at Japanese Society of School Health has finalized the Q&A at the end of FY2008, and it is supposed to be posted on their website shortly.

Children spend a large part of their time at school. In order to provide children a safe, secure, and healthy environment at school, parents, school staff, physicians, and the students themselves should share and utilize the information regarding the student’s allergic diseases based on the medical evidence. I very much hope that the Allergy Form will be used efficiently for that purpose.

References
