A glimpse of the effects of sublingual allergy immunotherapy tablets for allergy to house dust mites on Japanese adolescents


Introduction

• The tablet MITICURE™ was developed by ALK corporation for sublingual allergic immunotherapy of allergic rhinitis due to house dust mites.
• This tablet has been marketed and used in Japan since 2015.
• This report mainly focuses on the induction of sublingual allergy immunotherapy, using this tablet in adolescents.

Subject and Method

The tablet MITICURE™ was developed by ALK corporation for sublingual allergic immunotherapy of allergic rhinitis due to house dust mites.
• This tablet has been marketed and used in Japan since 2015.
• This report mainly focuses on the induction of sublingual allergy immunotherapy, using this tablet in adolescents.
• Thirty-seven patients (24 men and 13 women) with allergy to house dust, from the age of 12 to 18 years, at the time of onset of symptoms of buccal allergy to acarida, who visited the Otolaryngology Outpatient Department at the Osaka City University between July 2016 and December 2017, were enrolled. With respect to the age distribution, 10, 6, 6, 2, 4, 6, and 3 patients were 12, 13, 14, 15, 16, 17, and 18 years old, respectively. Six patients exhibited allergy to house dust only, while 31 patients exhibited allergy to both house dust and cedar. (Fig.1)

• We used the tablets for buccal immunotherapy against acarids to treat patients with house dust allergy. After administering 3300JAU initially, we confirmed a positive response, and increased the dosage to 10000JAU one week later, which was continued.
• Prior to induction, antiallergic agents, antiallergic agent/vasoconstrictor formulations, and rhinencestis steroid medication were used to control the nasal manifestation of allergy. The treatment course was administered once a month on an ambulatory basis.

Results

• Adverse effects of the drug were observed in 18 cases (48.6%). All the effects were minor, and Serious Adverse Drug Reaction, including anaphylaxis, was absent. These effects included: itching of hypoglossal swelling (2 cases), sense of incongruity of the pharynx (4 cases), cuts of the ear (2 cases), and sore throat (2 cases). (Fig.2,3)• All doses were regulated depending on the manifestation, but administration was discontinued in 2 cases. Treatment was continued past 6 months for 29 cases (79.3%). Treatment was aborted for 6 of these cases (cancellation in 2 cases, ambulatory discontinuation due to adverse drug effects in 4 cases). (Fig.4)

• The tablet MITICURE™ can be safely administered to adolescents from the age of 12 to 18 years. However, the support system must be examined before continuation of the treatment.

Conclusion

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