

## Answers to Audience Questions - WSPOS World Wide Webinars

### WWW 15 – Season 2 – Allergic Conjunctivitis



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1. Fernanda: Why didn't you give some steroids before the Cyclosporine?

DBG: The case seemed very severe.

FP: Because he has used loteprednol for a long Time AND we could not control IOP; it was a very severe case to keep trying with topical steroids

2. Fernanda: What was the dose of Bevacizumab sub-conjunctival inj. used for the patient?

FP: 0.25 MG in 0.2 ml

3. Fernanda: Did this case receive tacrolimus cream for skin use?

FP: Yes, ointment - 0.03%

4. Yair: Did you have any experience of doing papillectomy for intractable giant papillae? With or without amniotic membrane transplantation?

YM: I think papillectomy is contra-indicated. When we inject steroids, the papillae disappear within a week or two. Why should we create a scar tissue?

DBG: Papillectomy works, however, it creates conjunctival fibrosis scars, so not recommended.

FP: WRT Did you have any experience of doing papillectomy for intractable giant papillae? - I never did that surgery. I avoided it because of risk of scars.

WRT With or without amniotic membrane transplantation? – With.

SWL: Surgical excision of super giant papilla with AMT works.

5. Lisbeth: Do you recommend allergy testing for these kids?

LVK: Yes always! By allergy testing you get a better picture of the condition your patient is having. It makes it possible to advise about allergen removal and you can better talk with the patients about which seasons must be given the highest attention (remember, they get better symptom control, if Intranasal glucocorticosteroids are started about 2 weeks BEFORE the pollen season when the patient suffers from pollen allergy).

However, be aware: A negative allergy test do NOT rule out allergic rhinitis. Maybe they have an allergy for something you did not test for? Maybe they suffer from local allergic rhinitis (Local allergic rhinitis: Implications for management. Campo P, et al. Clin Exp Allergy. 2019. PMID: 29900607 Review. )

BQL: A positive skin test is a historical marker, but not necessarily relevant for clinical disease. As opposed to the eye where Cytology is not very useful, a smear of nasal mucus and the attendant eosinophilia you may see, is relevant for the last day. While cytology is quite old, it's useful clinical testing. In addition to what Elizabeth said about skin test or serological tests not reflecting allergy, the reverse is also true. For example, a positive peanut skin test is seen in up to 6% of the population where the actual peanut sensitivity is much lower.

6. Lisbeth: Are there any serological tests to monitor treatment?

LVK: I assume you are asking about tool to monitor Allergen immunotherapy (AIT).

I find that the best way to monitor the treatment is to simply talk to the patient. If we find no effect of AIT after about one year of treatment, we stop the AIT.

Some scientist measure IgG. AIT is found to induce allergen-specific blocking IgG antibodies. This however is not a tool everyone agrees on. There is a lot of research been done on this field.

For a practical guideline for AIT, you can go to EAACI Guidelines on Allergen Immunotherapy: Allergic rhinoconjunctivitis. Roberts G, Pfaar et al. Allergy. 2018 Apr;73(4):765-798. doi: 10.1111/all.13317. Epub 2017 Oct 30. Allergy. 2018. PMID: 28940458

BQL: it is intuitive to think that with improvements in clinical symptoms, that a parallel improvement in the size of skin test would also accompany that observation. Indeed, skin tests, do not change very much except for going from negative to positive on occasion. Therefore, the timing of allergy immunization is crucial. Since allergy immunotherapy is by definition expensive, lengthy and quite logistically difficult, I may delay immunotherapy until I think a more or less adult database has been achieved, or at least a database that explains the patient's symptomatology well. The enthusiasm of treating very young patients with immunotherapy, is sometimes blunted by discovery of new antigens and longer treatment. The goal of our effort is to reduce the symptomatology for a period of somewhere between 10 and 17 years, not a cure. The most critical period I am worried about is the young girl in childbearing age and try to fit the asymptomatic slot to cover that time of life. Allergy is a permanently cycling genetic disease, with new immunotherapy protocols likely in later life.

I agree with Lisbeth about the doctor- patient conversation is the best follow-up. I use quality of life questionnaires every three months to detect changes.

7. Lisbeth: In this particular case if you had to make a choice between topical Cyclosporine and topical Tacrolimus what would be your first choice?

LVK: I think that question is better given to the ophthalmologists

BQL: My choice is to refer to ophthalmologist because they have the tools to follow patients

DBG: Both options are ok if you have access to topical Tacrolimus emulsion

FP: I have More experience with cyclosporine AND in my country we have More access to cyclosporine

SWL: I use cyclosporine eyedrops for the eye, tacrolimus ointment for eyelid

8. Lisbeth: I have a patient currently with Hay fever, being treated with tapering corticosteroids and Restasis. What's the next best option for treating persistent ocular symptoms?

LVK: Good question.

I early address **allergen removal**. (It may have to be given in steps – they often love that cat or dog)

The first treatment I give to the patient is daily **Intranasal glucocorticosteroids maybe combined with antihistamine** and daily **topical ocular antihistamine**.

Then I would add daily **oral antihistamine** and **Leukotriene receptor antagonist (montelukast)**

If the patient was very affected of his / her allergy, I might have to add a few days of **oral corticosteroids** to get a better control with the symptoms.

We would talk about **Nasal saline irrigation**

All these things help lower the activity of the hay fever, and it often has a good effect on the ocular symptoms as well.

If this was not enough to control the symptoms, I would ask my ophthalmologist colleagues to start treatment with **topical corticosteroids for the eyes.**

(I have no experience with Restasis)

As you can see, your patient is missing the first part of the treatment. That is a shame because the first steps have the mildest side effects attached.

Maybe an ophthalmologist on the panel might want to add anything here?

BQL: When doing pharmaceutical trials for antihistamines, a wide range of doses are studied. The final dose is consistent with the marketing goals of the company to fill a perceived demand. Some over-the-counter drugs, especially those emphasizing low sedation rate, may have limited efficacy. The goal of antihistamine therapy is to match the patient's level of histamine release. To do dose escalation with antihistamines, common in urticaria, can be safely done in Allergic Rhinitis by physicians who keep up safety monitoring.

DBG: Next option is cyclosporine higher dosage or higher frequency

SWL: I will use higher dosage cyclosporine, lubricating eyedrops together with a short course of topical steroids

9. Lisbeth: In addition to nasal saline rinses, what would be your next step for allergic rhinitis?

LVK: I work with children, therefore using nasal saline rinses is placed late in my treatment. If I give my patients too many uncomfortable treatment advices, I quickly lose adherence. I mostly follow the algorithm listed under question 8. If the first steps are enough to get symptom control, I do not add the last steps.

DBG: Antihistamine spray

10. Do we need give oral anti histamine for allergic conjunctivitis or VKC?

YM: In my experience, this is rarely useful.

DBG: Usually for severe allergic conjunctivitis or VKC oral anti histamine helps

SWL: Yes, in severe cases

11. Would you give antihistamine / mast cell stabilizers only for flare-ups of the conjunctivitis or also as maintenance therapy in between episodes?

YM: I think the best option is to use the multiple action drugs like Azelastine or Olopatadine continuously. This will gradually reduce the allergic activity to a minimum.

DBG: Yes I give antihistamine / mast cell stabilizers in association and in winter alone

FP: Yes if its works

BQL: I use topicals on demand, since they are so very effective

SWL: I use it for both, flare ups and maintenance

12. What is the role of antihistamine-receptor mast cell stabilizers in the treatment? Do we still need them?

YM: Please see my response to Q 11.

DBG: Yes we need them in association as it works on symptoms

BQL: Definitely utilize

SWL: I use it for both flare ups and maintenance

13. How long we can give in continuity Cyclosporin drops?

YM: There is no time limit. Some of my patients are treated for 5-6 years.

DBG: For years, if necessary

FP: Many years

SWL: No time limit

14. When should we consider giving Cyclopentolate to VKC?

YM: When multiple action drugs like Azelastine fail to control the disease. I use cyclosporine very frequently and find it extremely useful.

DBG: I never use it, as treatment is rapidly effective.

FP: We used in this case because he was with a Lot of pain for a couple of days

SWL: I don't really use it in VKC.

15. What is the dose range and duration of using Cyclosporin?

YM: Topical: 1% with no time limit. Oral: 3-5/mg per kg per day.

DBG: Usually I begin with Cyclosporine 0.1 CE x 4 or 2% x 2 to 4 and taper as soon as possible, never before 3 months. Duration is adapted to seasonal forms or perennial forms

FP: I begin with Cyclosporine 0.1 CE x 4 or 1% x 2 to 4 and taper as soon as possible never before 3 months

SWL: depending of the severity, I start off with cyclosporine 0.1% eyedrops for at least 2 to 3 months

16. Has anyone also noticed that palpebral forms respond better to Cyclosporine, while limbal & mixed forms to Tacrolimus eye ointment?

YM: I haven't noticed this.

DBG: In my experience all VKC forms respond equally (in my country!)

FP: The cases I have treated have responded to both

SWL: Not really

17. What's the recommended conc. to start off with for Cyclosporine?

YM: I use only 1%

DBG: Usually I begin with Cyclosporine 0.1 CE x 4 or 2% x 2 to 4

FP: Usually I begin with Cyclosporine 0.1

SWL: I start off with cyclosporine 0.1% eyedrops for at least 2 to 3 months

18. What about topical Cyclosporine's side effects? I have seen neovascularization of corneal stroma after 7 months of use.

YM: There are no reported side effects. I suspect the NV you saw is due to the disease.

DBG: I think neovascularization is due to the disease and indicates a non-effective treatment

FP: I believe this is due to the pathology, not to the treatment

SWL: I don't think that is due to the cyclosporine

19. Which method for IOP check do you usually use in your clinical practice?

YM: I-care

DBG: Icare system

SWL : i-care

20. While on topical Cyclosporine, when must we stop topical steroids?

YM: Usually it takes 2-3 weeks for the cyclosporine to be effective and then we can stop steroids.

DBG: Cyclosporine works in 10 days to 3 weeks, so the steroids should be stopped at this time taking into account the tapering.

FP: No More than a week / 10 days

SWL: 10 to 14 days

21. What's your opinion on Tacrolimus instead of Cyclosporine?

YM: Both are very effective. I think Tacrolimus is slightly more effective.

DBG: Good option if you have access to topical Tacrolimus emulsion

FP: Good experience

SWL: I only have access to tacrolimus ointment and cyclosporine eyedrops