

MANAGEMENT OF COMMON ALLERGIC PROBLEMS IN OFFICE PRACTICE

SPEAKER

Dr Ankit Parakh

CHAIRPERSONS

Dr Vikas Taneja

Panelists

Dr Himshikha Aggarwal, Dr Ritika Goyal, Dr Tanvi Pal

Dr Ankit Parakh



PRESENT DESIGNATION: Associate Director, Pediatric Pulmonology, Allergy & Sleep Medicine

PRESENT AFFILIATION: BLK MAX Hospital, New Delhi & Children's Chest Clinic, New Delhi

AREAS OF INTEREST: Interventional Pediatric Bronchoscopy, Sleep Medicine

MAJOR ACHIEVEMENTS:

- European Diplomat of Pediatric Respiratory Medicine
- ERS Sleep Fellow (GOSH, UK)
- APSR Fellow Sleep Medicine (LCCH, Brisbane)
- RCPCH Fellow, London, UK
- Pediatric Allergy Testing (Imperial College London)

Dr. Vikas Taneja

8:14:53 AM



Designation	Director & Unit Head, Pediatrics & PICU
Current Affiliation	Max Super Speciality Hospital, Dwarka
Achievements	<ul style="list-style-type: none">• Publication in National & International Journals• Contributed Chapters in various books• Have > 100 citations• Special Interest in POCUS & Pediatric transplant

Dr. HIMSHIKHA AGGARWAL

Consultant Ophthalmologist Chinmaya Vision

- Specializes in Pediatric Ophthalmology and Strabismus
- MBBS, Lady Hardinge Medical College and MS Ophthalmology, Maulana Azad Medical College
- Completed 3 years of Senior Residency from Guru Nanak Eye Centre, MAMC and a short-term fellowship at LV Prasad Eye Institute, Hyderabad in Pediatric Ophthalmology and Strabismus
- Backed by a strong academic foundation, with several research publications in leading national and international journals



Dr Tanvi Pal



DESIGNATION	Consultant Pediatric Dermatologist
CURRENT AFFILIATION	Blk Max Super Speciality Hosp. Kubba Skin Clinic Pal Medicare Centre, New Delhi
ACHIEVEMENTS	Various National and International Peer Reviewed Papers Speaker in Both Pediatric & Dermatology Forum



Dr. Ritika Goyal

Pediatric Pulmonologist and Allergy specialist
MD, DNB Pediatrics

European Diplomate Pediatric Respiratory Medicine

Fellowship in Pediatric Pulmonology, Sir Ganga Ram Hospital, New Delhi

Affiliations:

Consultant, MAX hospital Shalimar Bagh

Consultant, Sitaram Bhartia Institute of Science & Research, New Delhi

Areas of Interest:

Flexible Bronchoscopy in Neonates and Children,

Skin Prick testing for allergies, Allergen Immunotherapy

Pediatric asthma, Difficult-to-treat asthma

Aspiration and Swallowing Dysfunction

"Children are not tiny humans. They need nurturing and special care for better growth and development right from the beginning."

-Dr Ritika Goyal, MD



Panel Discussion

Allergies in Children

Moderator

Ankit Parakh

Pediatric Pulmonology
and Allergy Specialist

Panelist

Tanvi Pal

Pediatric
Dermatology

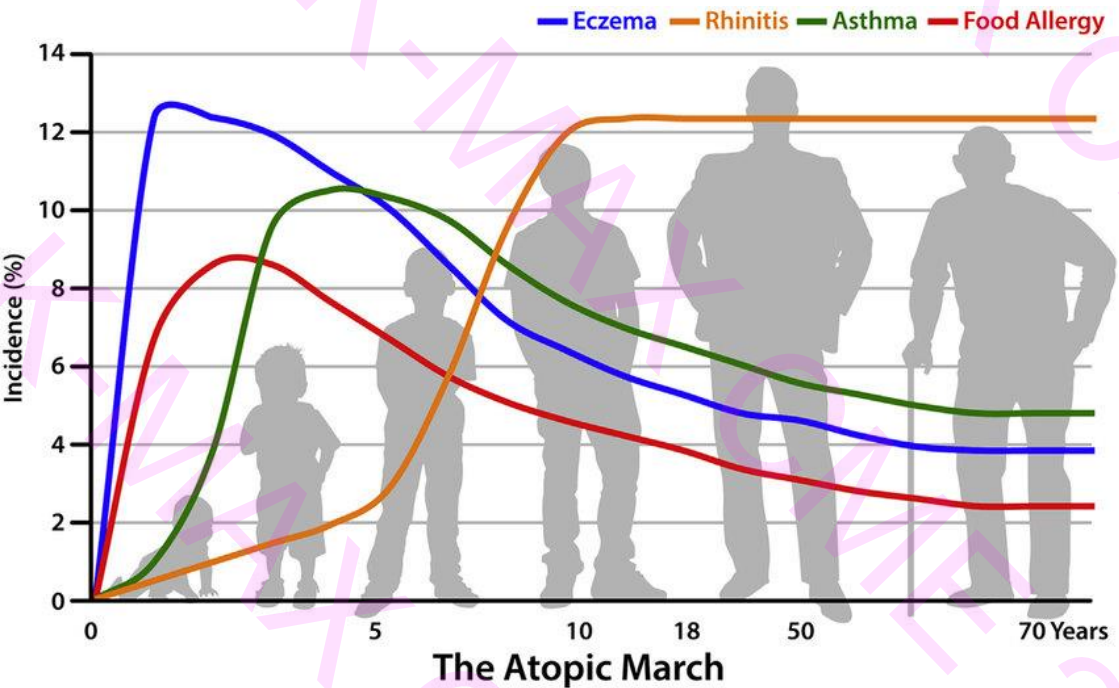
Himshikha Aggarwal

Pediatric
Ophthalmology

Ritika Goyal

Pediatric
Pulmonology,
Allergy Specialist

The Atopic March



The term atopic march refers to the temporal progression of symptoms during childhood from atopic dermatitis to asthma to allergic rhinitis

The common thread linking these allergic disorders is atopy, the predisposition for immunoglobulin E (IgE)-mediated responses to environmental stimuli

What do we AIM to discuss?

- Broad overview of
 - Atopic Dermatitis
 - Allergic Conjunctivitis
 - Food Allergy
- Comfortably diagnosis and manage mild-moderate cases
- Referral to specialist for difficult cases
- **HOLISTIC MANAGEMENT of a child with ALLERGIES**

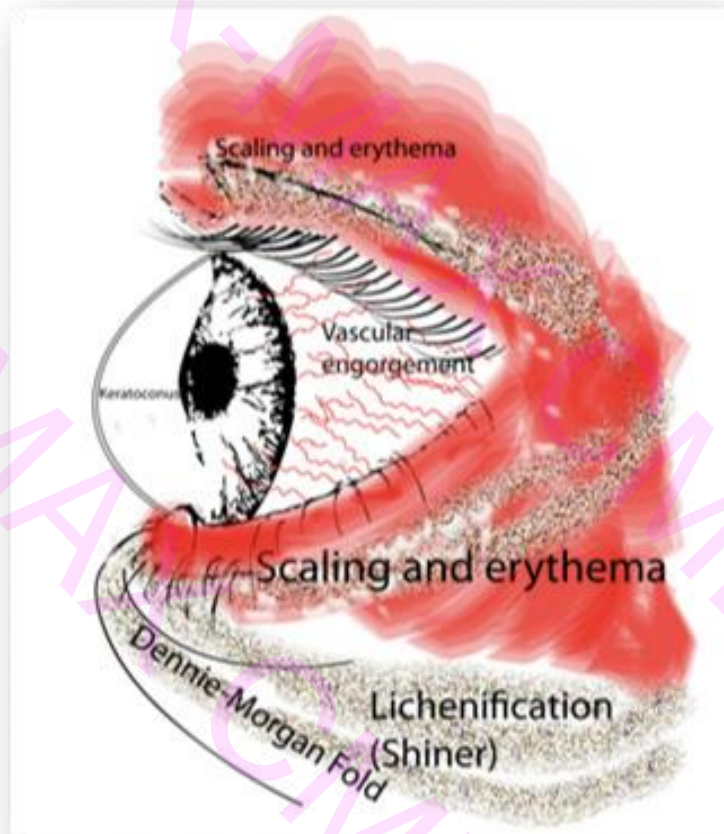
Ocular Allergy in Children

Background

- Eye is widely exposed to air- borne allergens.
- Isolated from body, the eye may react independently to allergens.
- Associated with
 - Allergic Rhinitis
 - Asthma
 - Atopic Dermatitis
- Significant impact on QOL
- Some for can end up in complications

**What are the ocular
manifestations of Atopic
Dermatitis?**

Ocular manifestations of atopic dermatitis



Skin

Eczematous rash
Lichenification
Hyperpigmentation

Hairs

de Hertoghe's sign
Madarosis
Trichiasis

Eye Lids

Dennie–Morgan folds
Ptosis
Blepharitis
Eyelid hypertrophy
Lagophthalmos
Cicatrization
Ectropion, Entropion

Conjunctiva

Hyperemia
Chemosis
Symblepharon

RED Eye

**What suggests Allergic
Conjunctivitis?**

Allergic Conjunctivitis

- Bilateral involvement
- Itching
- Redness
- Tearing
- Burning
- Stinging
- Chemosis (swelling of the conjunctiva)
- Discharge (usually watery but can be mucoid)
- The *sine qua non* of AC is itching, and a diagnosis of AC should be queried if the patient does not present with ocular itching.

The symptomatology of AC is dominated by these four cardinal signs

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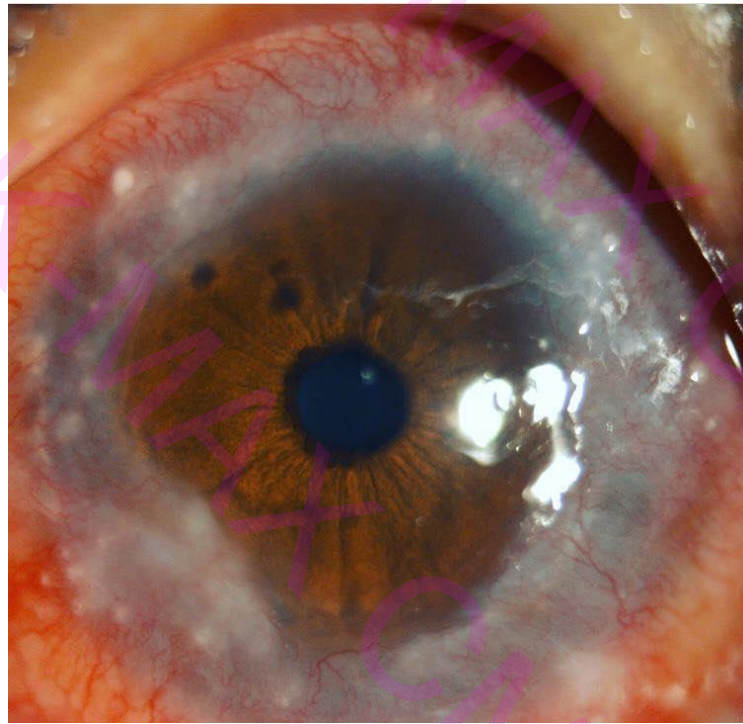
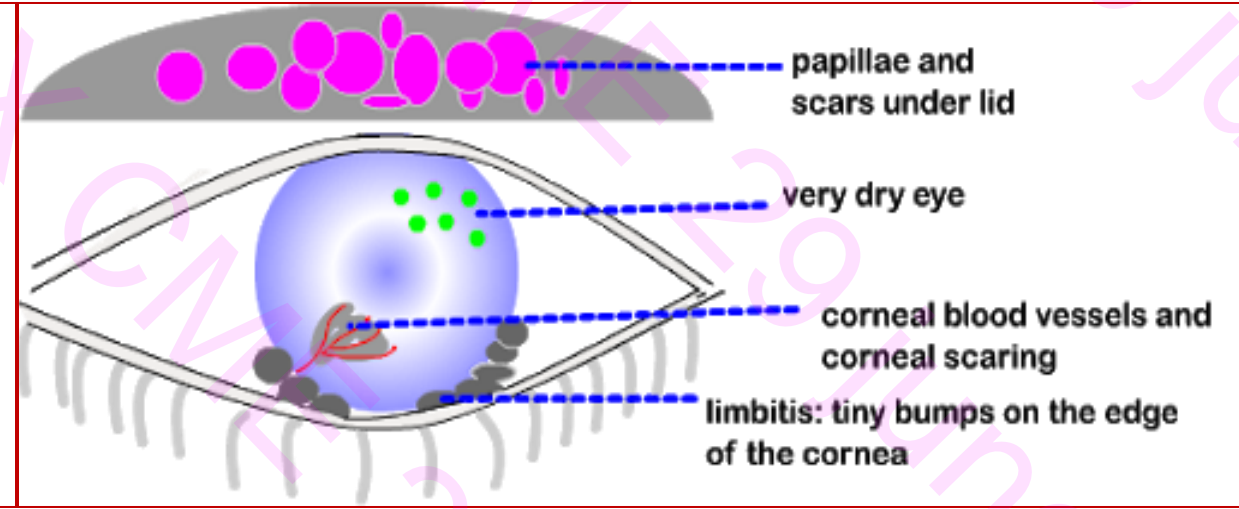
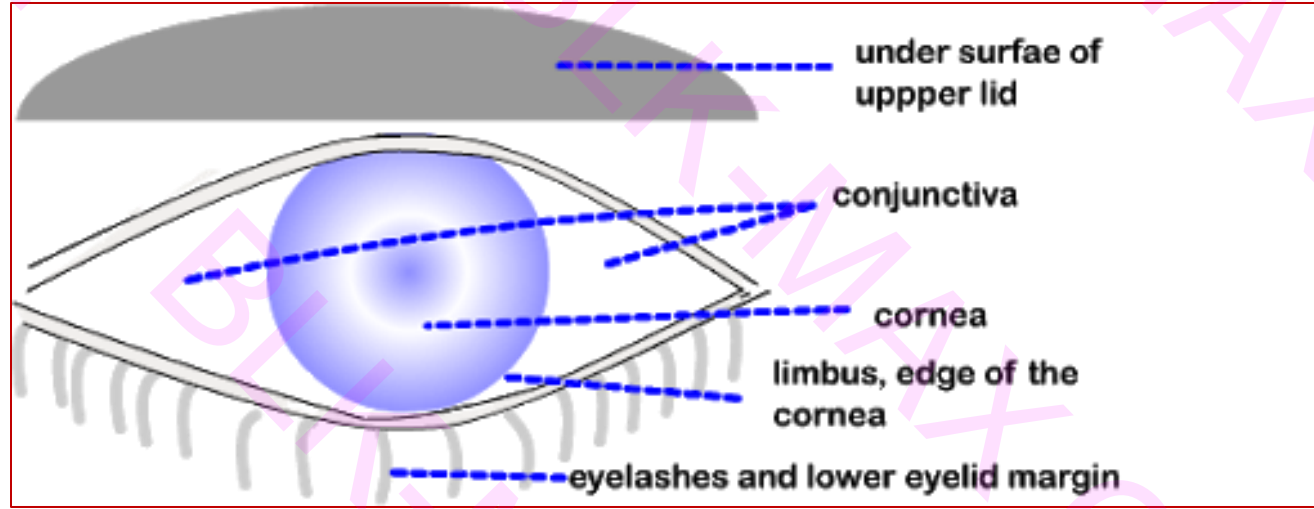
Tearing, Itching, Redness, Edema

Eye Examination

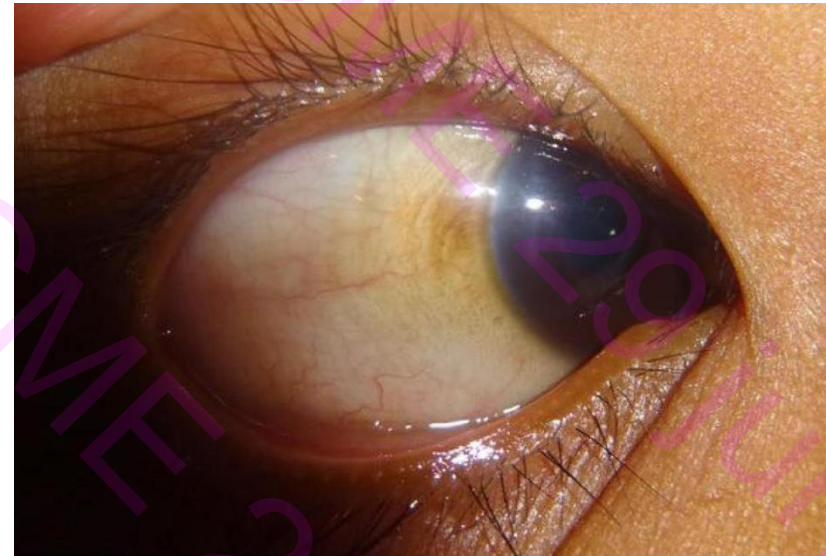
What suggests Allergic Conjunctivitis?

Eye Examination

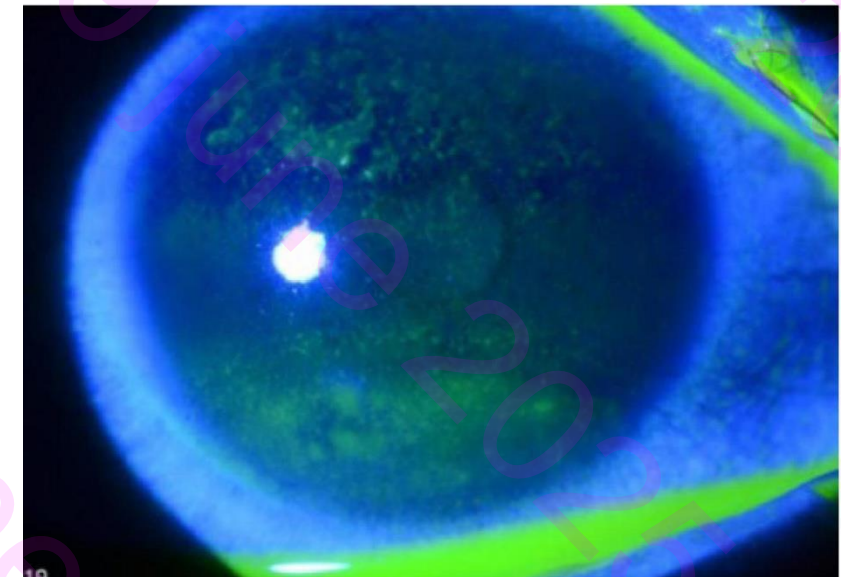
- Naked eye exam
 - Using a light source such as a penlight
- Ophthalmoscope exam
 - Advantage of being a source of magnification and illumination with a magnification of approximately 15X and a field of view up to 10 degrees.
- Slit lamp (biomicroscope) examination
 - Used by ophthalmologists offers the widest range of examination up to a magnification



Horner-Tranta Spots



Conjunctival Pigmentation



Superficial Punctate Keratitis

R



L



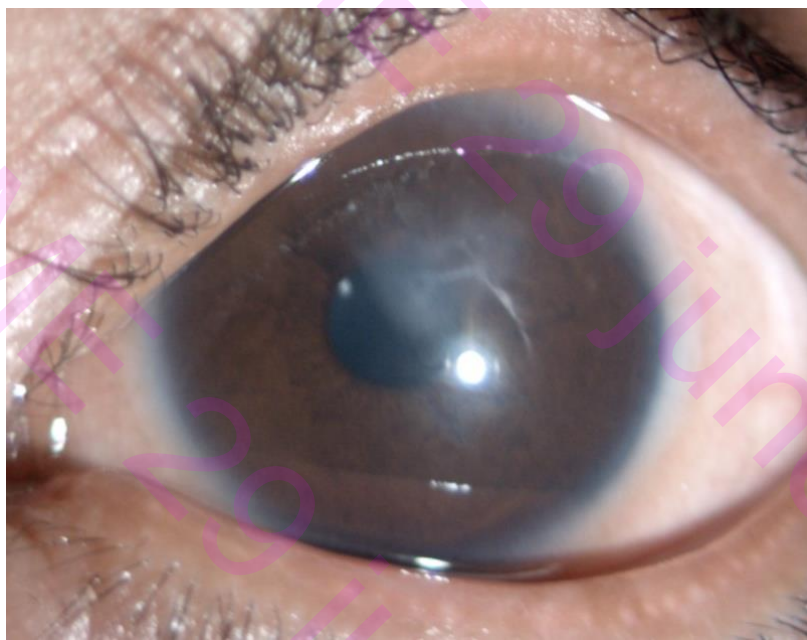
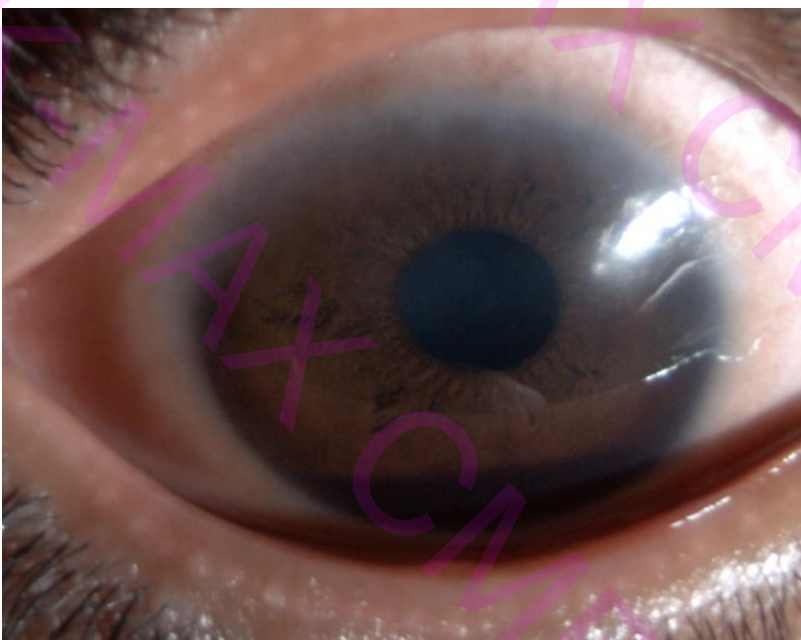
Signs

Conjunctiva:

- Giant Papillae
- Limbal thickening

Cornea:

- RE – SPK
- LE – Shield Ulcer



Signs of Severity

- Conjunctival Giant Papillae
- Limbal Inflammation
- Corneal involvement:
 - Superficial punctate keratopathy
 - Corneal scars
 - Pannus
 - Shield ulcers or plaques

Comparison of Various forms of Allergic Conjunctivitis

	Seasonal Allergic Conjunctivitis	Perennial Allergic Conjunctivitis	Vernal Keratoconjunctivitis
Age	Any age	Any age	Young boys + teens
Allergy Mechanism	IgE mediated	IgE mediated	IgE + Non IgE
Symptoms	TIREd	TIREd	TIREd + Severity Symptoms
Eye Lids	Normal	Normal	Eye lid edema
Conjunctiva	Follicles + papillae	Follicles + papillae	Giant papillae
Limbus	Normal	Normal	Trantas Dots + thickened
Cornea	Normal	Normal	SPK Shield ulcers Plaques Opacities Neovascularization

How would you treat these
children in OPD?

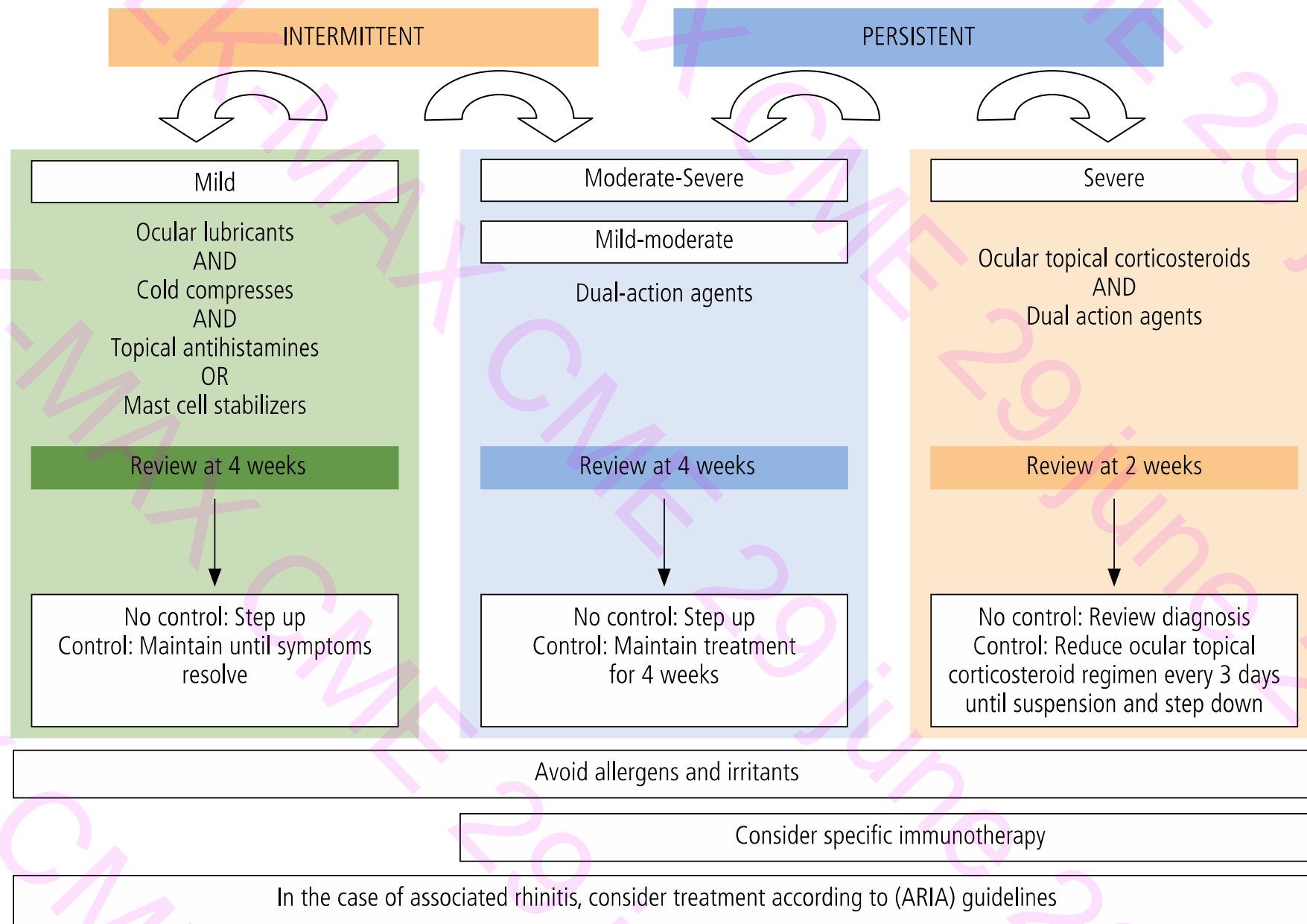


Figure 3. Treatment of allergic conjunctivitis proposed in the Consensus Document on Allergic Conjunctivitis (DECA) (grade of recommendation D).

Response to Treatment (R)

Signs

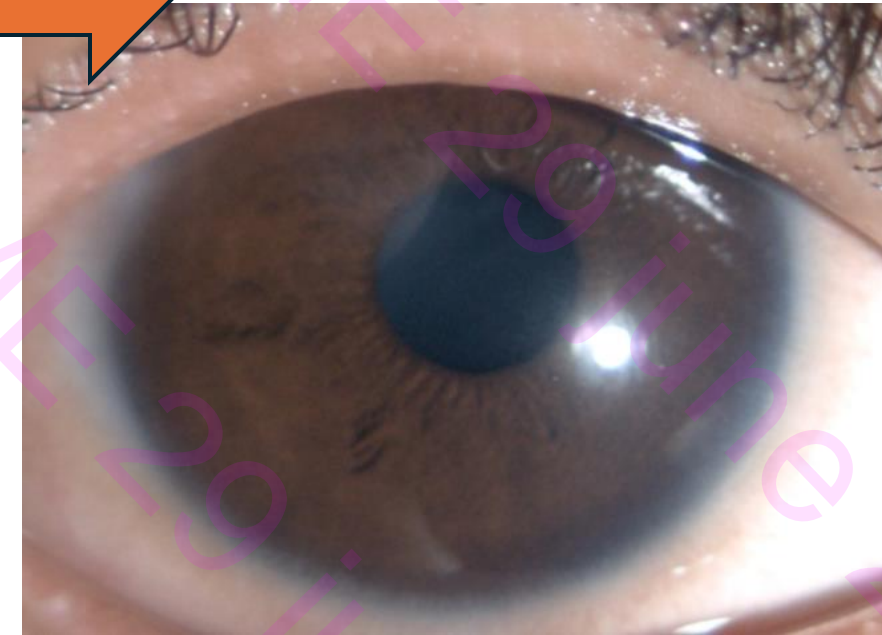
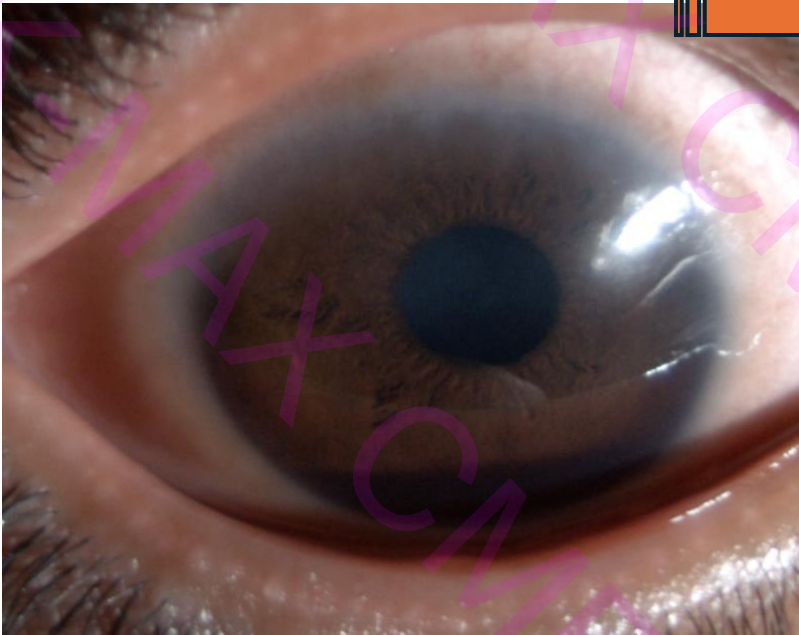
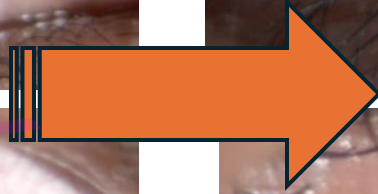
Conjunctiva:

- Giant Papillae
- Limbal thickening

Cornea:

- RE – SPK

BETTER



Response to Treatment (L)

Signs

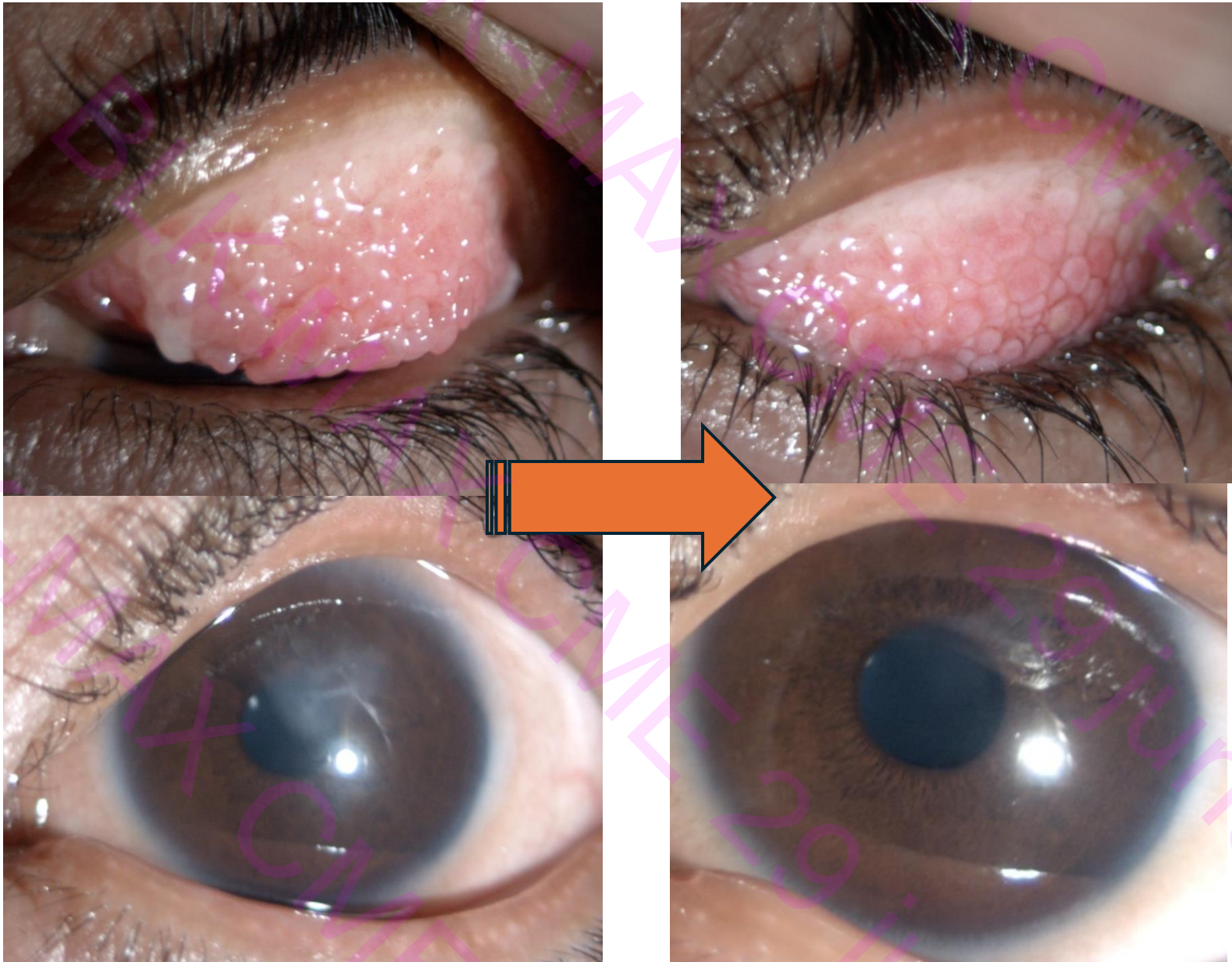
Conjunctiva:

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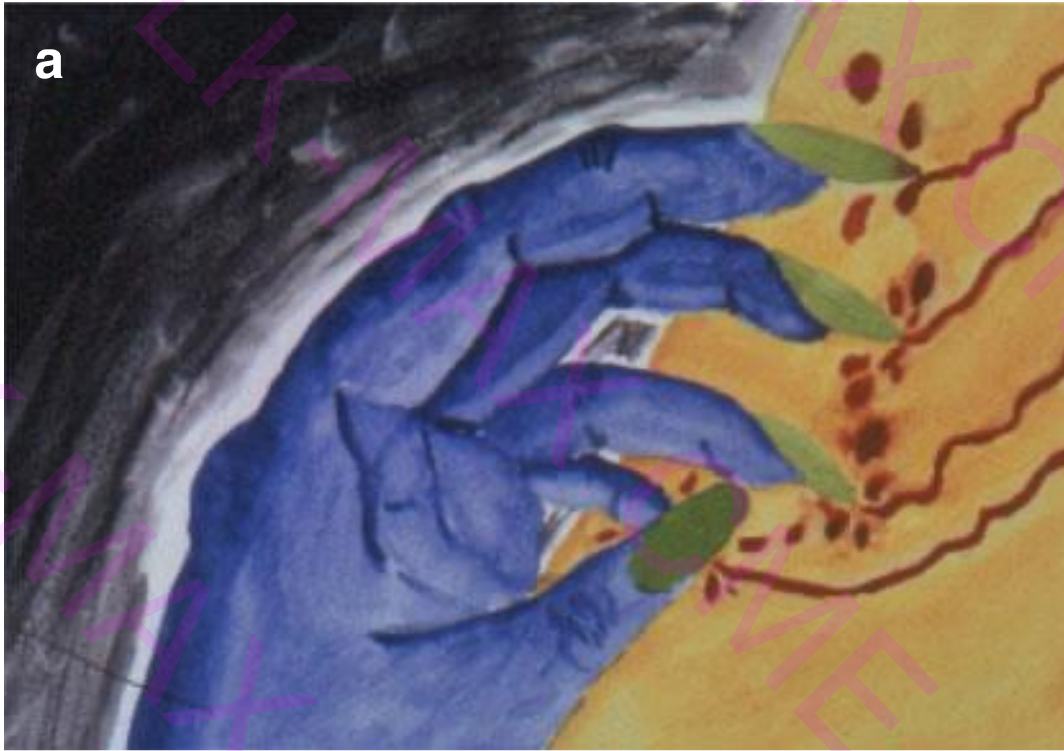
- LE – Shield Ulcer

BETTER



- What is the role of an allergy specialist?
- What is the role of an eye specialist/cornea specialist?

Atopic Dermatitis



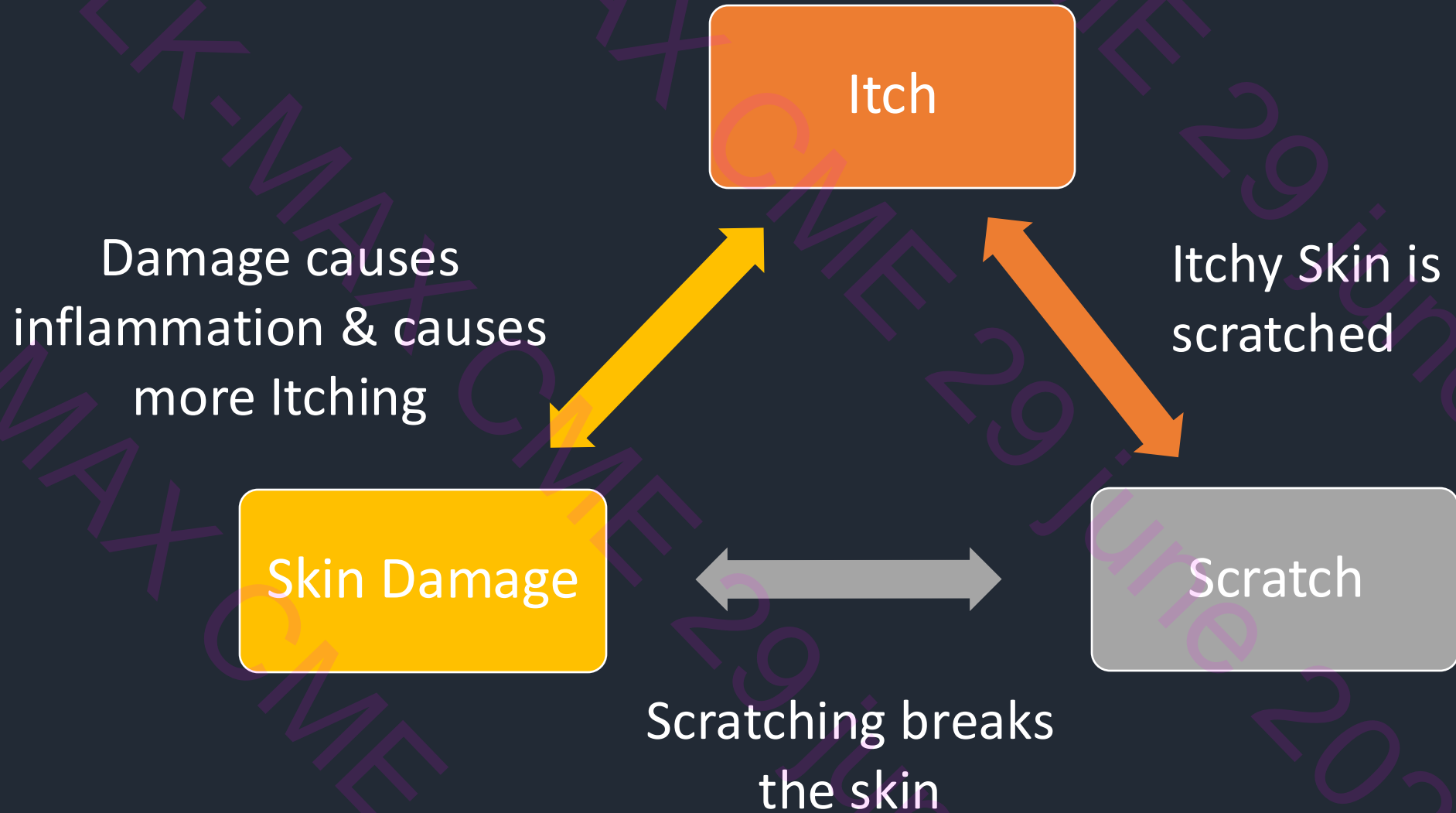
“It is not the rash which itches, but the itch that rashes” (Engman et al. 1936)

The primary lesion “itch” leads via scratch effects to the typical skin changes of atopic dermatitis

Atopic Dermatitis

What is the pathogenesis?

ITCH SCRATCH CYCLE



Atopic Dermatitis

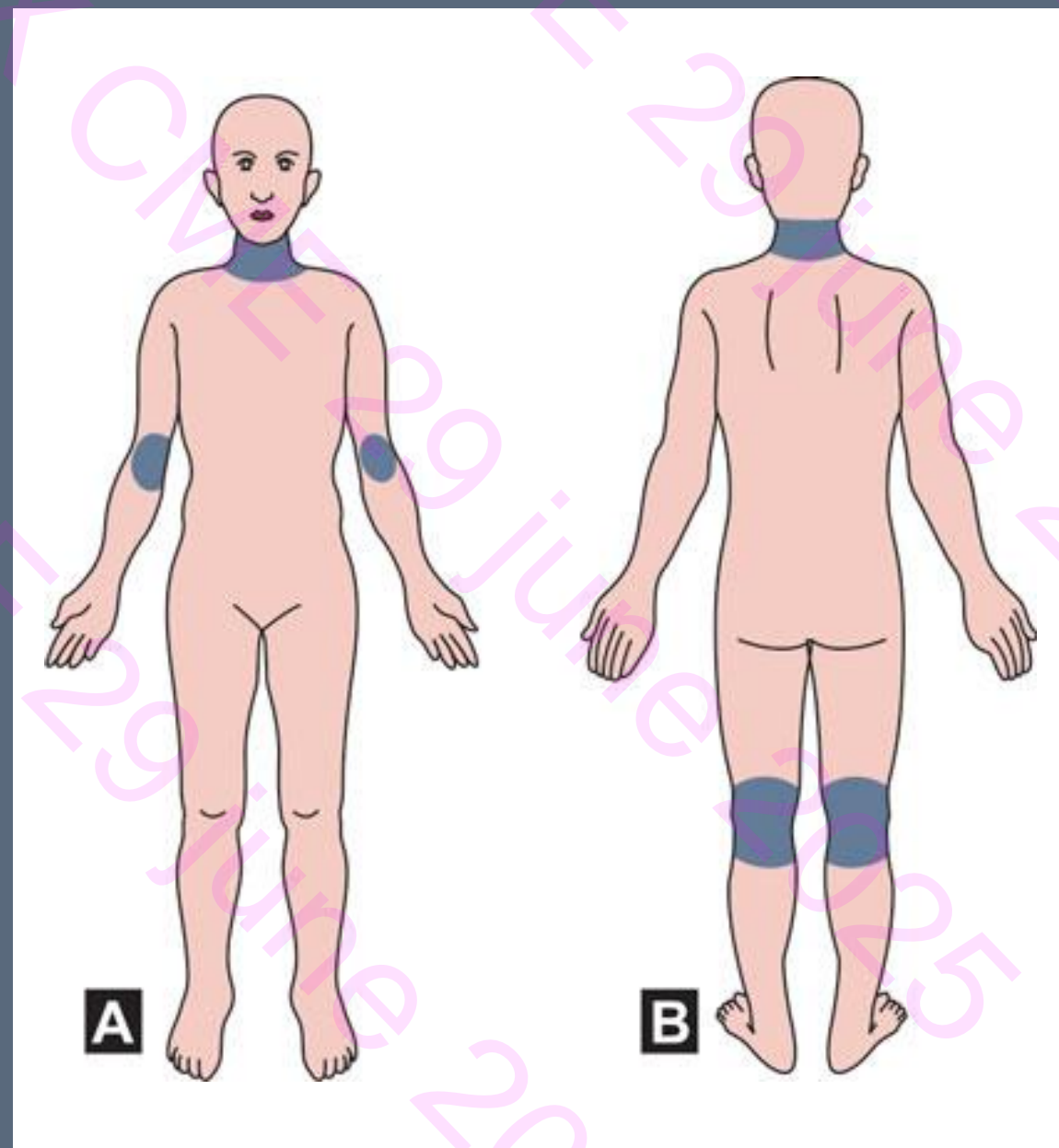
What is the clinical picture?

Atopic Dermatitis

Clinical Presentation

- 6 skin findings of eczema
 1. Erythema (infiltrated)
 2. Papules/edema
 3. Exudation - oozing and crusting
 4. Scale
 5. Excoriations
linear erosions from scratching
 6. Lichenification
thickened, hyperpigmented, leathery skin due to rubbing (accentuated skin markings)
- Symmetric > asymmetric

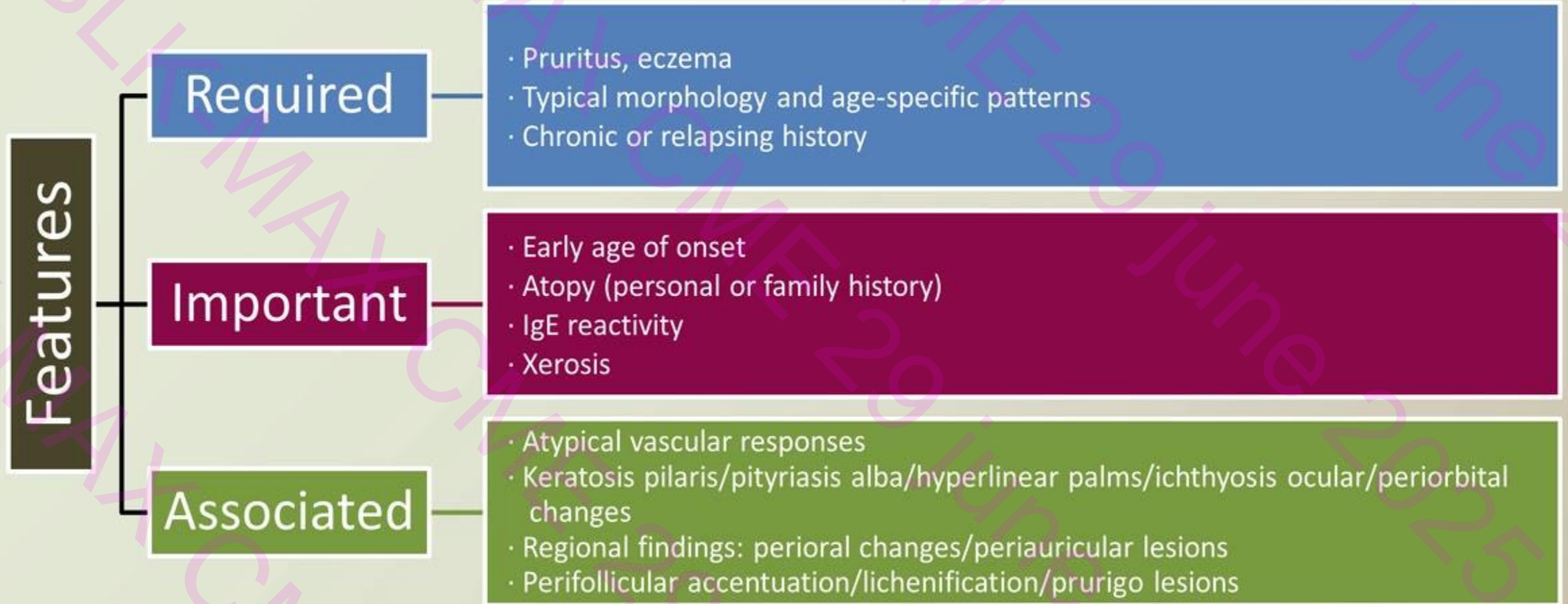




Atopic Dermatitis

Any diagnostic criteria?

AAD Diagnostic Guidelines



Adapted from Hanifin, Rajka. Acta Dermato Venereol. 92(suppl):44-7;1980
and AAD Consensus Conference on Pediatric Atopic Dermatitis

Treatment

- Bathing
- Moisturizer
 - Which
 - How to apply
- TCS and TCI
- What to avoid

Mild to Moderate Atopic Dermatitis: Poor Control

Symptomatic on low-mod dose TCS, basic management of skin, antiseptics, avoidance of allergens & triggers

Increase TCS dose
or potency

Add TCI

Add Crisaborole
2% ointment

3 months therapeutic trial with
reassessment at 4-8 weeks

Moderate-Severe Atopic Dermatitis: Poor Control

Symptomatic on aggressive Topical therapy (TCS, TCI, Crisaborole)
for >3 weeks basic management of skin, antiseptics, avoidance of
allergens & triggers

Significant impact on quality of life

Phototherapy

Dupulimab

Systemic
Immunosuppressio

Consider wet wraps
Hospitalization

3 months therapeutic trial with
reassessment at 4-8 weeks

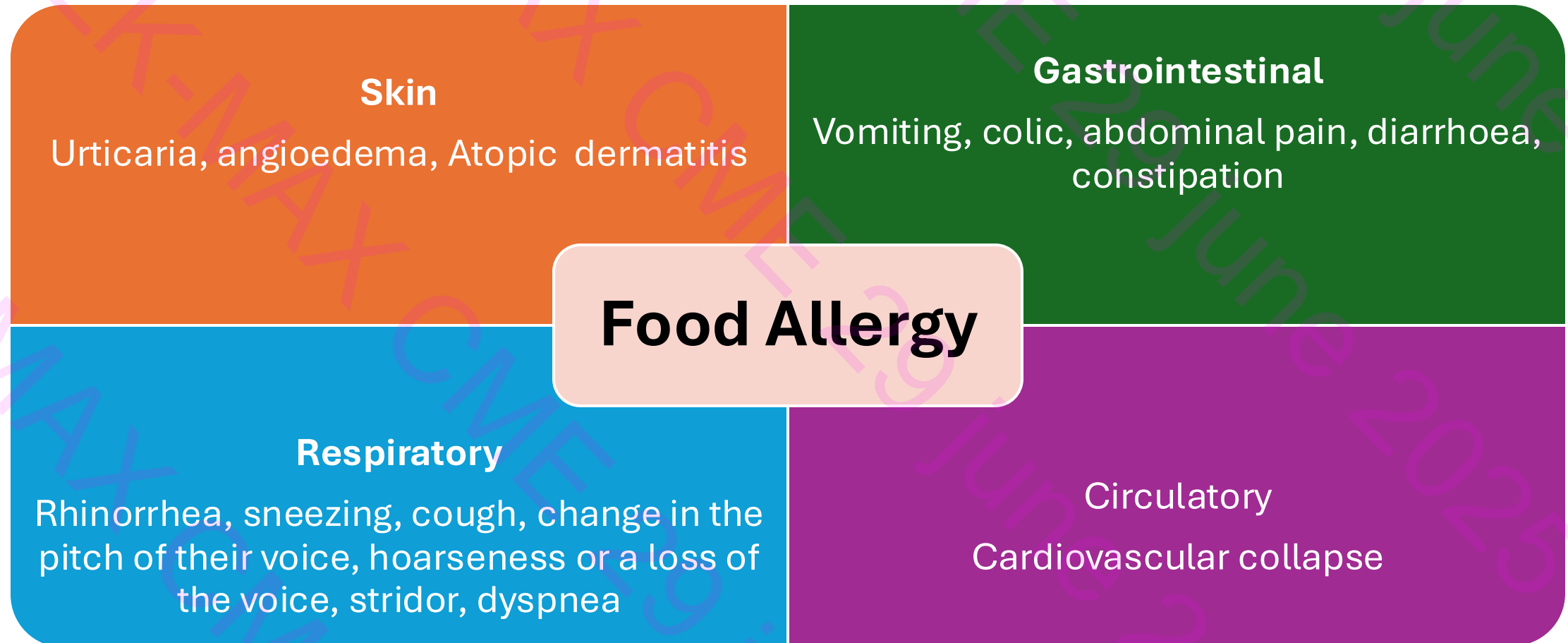
- What is the role of an allergy specialist?
- What is the role of an eye specialist/cornea specialist?

Food Allergy

- What are the common food allergies seen in India?

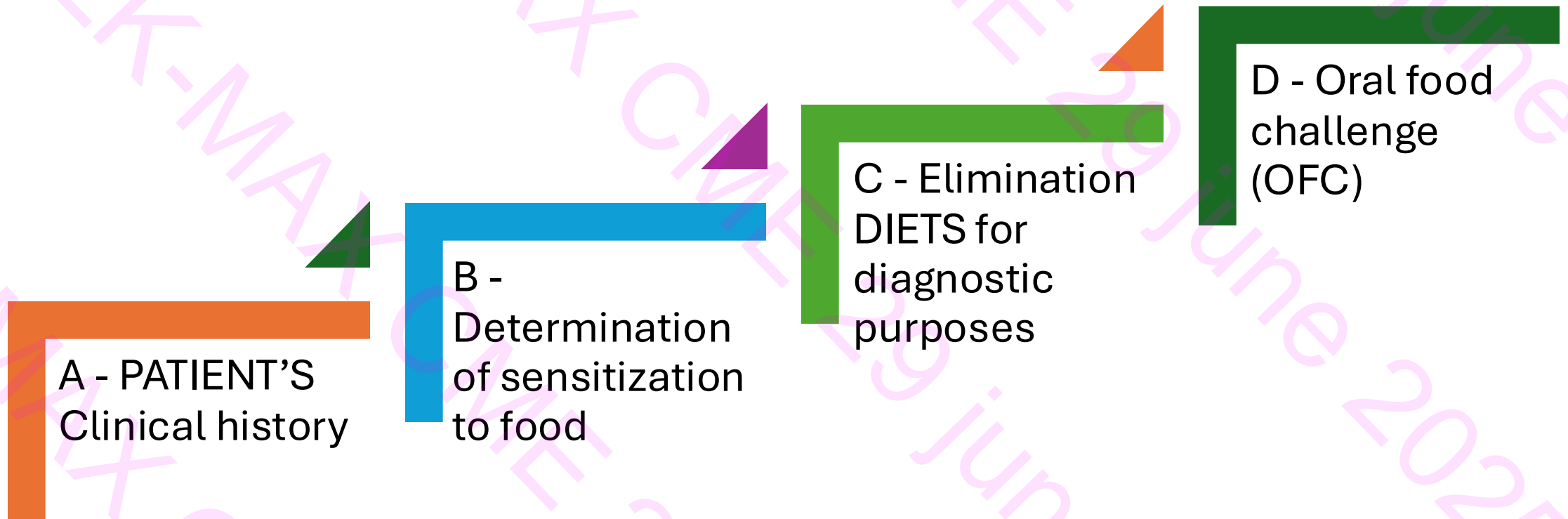
- Why is the spectrum different from Western countries?
- Do you think food allergies are likely to increase?

Clinical Manifestations of Food Allergy in children



Reactions can be triggered by food ingestion, inhalation and skin contact.

Diagnosis of Food Allergy



Allergy Tests

- What ALLERGY TEST would you do?
- **What tests are available?**
 - Skin Prick Test (SPT)
 - Serum Specific IgE (ImmunoCap)
 - Component Resolved Diagnostics (CRD)
- **Avoid Nonselective testing**
 - Increases the risk of clinically irrelevant false positive results
 - Especially true for food allergens.

Long-term management strategies

- Elimination DIET
- Education and risk assessment
- SPECIFIC immunotherapy
- AnTI-IgE
- Challenges at regular intervals to assess achievements of tolerance
- Cofactors

Thank You!