LES ALLERGIES ALIMENTAIRES ET L'ANAPHYLAXIE

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Pneumo-Allergologue

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- La prise en charge

LES ALLERGIES ALIMENTAIRES

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- Le diagnostique
- Le Spectre Clinique
- La prise en charge aigüe et sur le longue terme
- La qualité de vie

Cas cliniques

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L'ANAPHYLAXIE

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- https://www.youtube.com/watch?v=hvDeEczAF8k

LE ROLE BIOLOGIQUE DE L'ANAPHYLAXIE

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- Incidence EU : 1,5 – 7,9 / 100.000
- Prevalence EU : 0,3 %
- Mortalité : < 0,001 %

L'ANAPHYLAXIE en chiffres

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L'ANAPHYLAXIE se produit rapidement suite à l'exposition à un allergène probable

Souffrance cutanéo-muqueuse aigüe ET

Compromis respiratoire

OU

Chute TA ou symptômes de dysfonctionnement de l'organe (malaise, syncope, incontinence)

2 ou +

a. souffrance cutanéo-muqueuse

b. le compromis respiratoire

c. chute de TA ou malaise , syncope, incontinence

d. symptômes gastro-intestinaux persistants

CHOQUE HEMODYNAMIQUE après exposition à un allergène connu patient (minutes à plusieurs heures):

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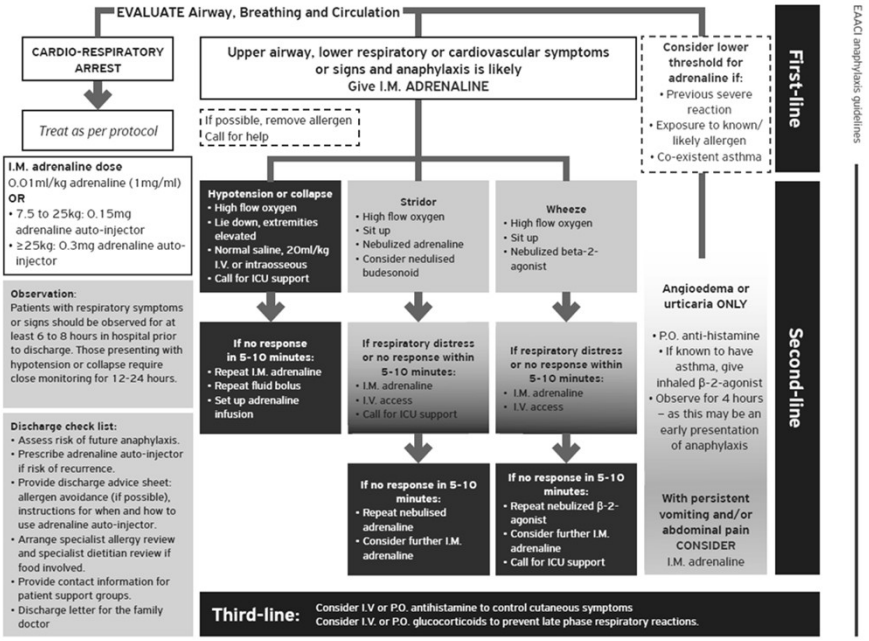
EVALUATE Airway, Breathing and Circulation
CARDIO-RESPIRATORY ARREST
Treat as per protocol
I.M. adrenaline dose
0.01ml/kg adrenaline (1mg/ml)
OR
• 7.5 to 25kg: 0.15mg adrenaline auto-injector
• ≥25kg: 0.3mg adrenaline auto-injector
Observation:
Patients with respiratory symptoms or signs should be observed for at least 6 to 8 hours in hospital prior to discharge. Those presenting with hypotension or collapse require close monitoring for 12-24 hours.
Discharge check list:
• Assess risk of future anaphylaxis.
• Prescribe adrenaline auto-injector if risk of recurrence.
• Provide discharge advice sheet: allergen avoidance (if possible), instructions for when and how to use adrenaline auto-injector.
• Arrange specialist allergy review and specialist dietitian review if food involved.
• Provide contact information for patient support groups.
• Discharge letter for the family doctor
Upper airway, lower respiratory or cardiovascular symptoms or signs and anaphylaxis is likely
Give I.M. ADRENALINE
If possible, remove allergen
Call for help
Consider lower threshold for adrenaline if:
• Previous severe reaction
• Exposure to known/ likely allergen
• Co-existent asthma
First-line
Hypotension or collapse
• High flow oxygen
• Lie down, extremities elevated
• Normal saline, 20ml/kg I.V. or intraosseous
• Call for ICU support
Stridor
• High flow oxygen
• Sit up
• Nebulized adrenaline
• Consider nedulised budesonoid
Wheeze
• High flow oxygen
• Sit up
• Nebulized beta-2-agonist
If no response in 5-10 minutes:
• Repeat I.M. adrenaline
• Repeat fluid bolus
• Set up adrenaline infusion
If respiratory distress or no response within 5-10 minutes:
• I.M. adrenaline
• I.V. access
• Call for ICU support
If respiratory distress or no response within 5-10 minutes:
• I.M. adrenaline
• I.V. access
If no response in 5-10 minutes:
• Repeat nebulised adrenaline
• Consider further I.M. adrenaline
If no response in 5-10 minutes:
• Repeat nebulized β-2-agonist
• Consider further I.M. adrenaline
• Call for ICU support
Angioedema or urticaria ONLY
• P.O. anti-histamine
• If known to have asthma, give inhaled β-2-agonist
• Observe for 4 hours – as this may be an early presentation of anaphylaxis
With persistent vomiting and/or abdominal pain CONSIDER I.M. adrenaline
Second-line
Third-line: Consider I.V or P.O. antihistamine to control cutaneous symptoms
Consider I.V. or P.O. glucocorticoids to prevent late phase respiratory reactions.
EAACI anaphylaxis guidelines

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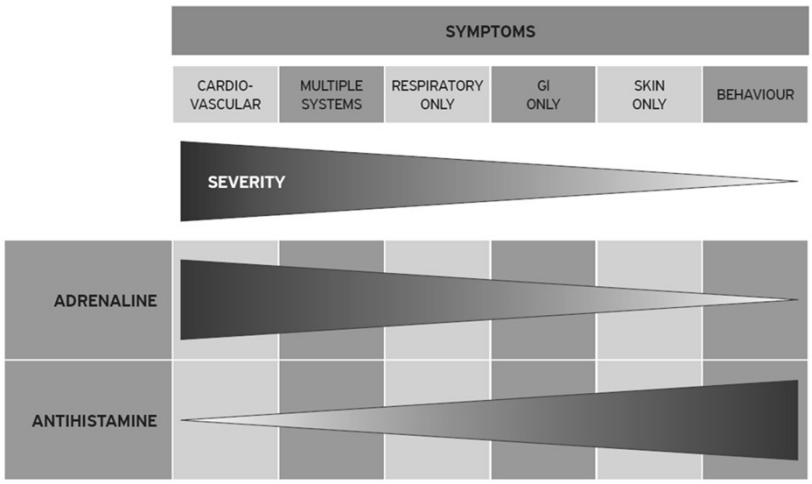
SYMPTOMS
CARDIO-VASCULAR
MULTIPLE SYSTEMS
RESPIRATORY ONLY
GI ONLY
SKIN ONLY
BEHAVIOUR
SEVERITY
ADRENALINE
ANTIHISTAMINE

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… LA TROUSSE DE SECOURS …

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… LA TROUSSE DE SECOURS …

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- PLAN D'ACTION INDIVIDUALISE; TS
- L'EDUCATION THERAPEUTIQUE
- **IDENTIFIER LE TRIGGER**
- L'IMMUNOTHERAPIE
- LA DESENSIBILISATION

L'ANAPHYLAXIE

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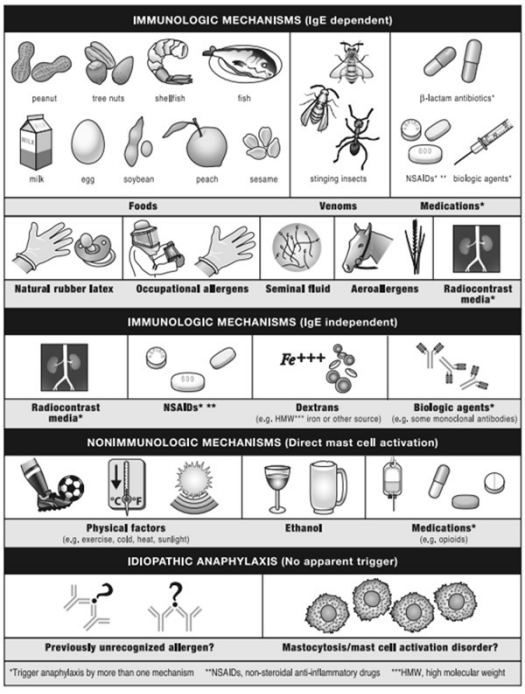

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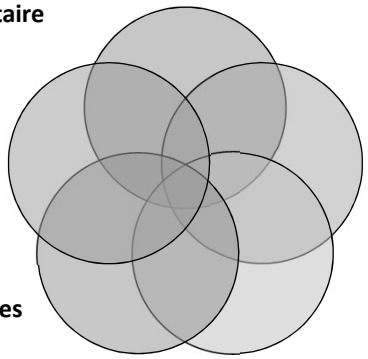
Mastocytose

Activation mastocytaire

IgE médiée

- Beta-lactamines
- Aliments
- Venin d'insectes
- Latex
- Liquide séminale



Activation mastocytaire DIRECTE

- Opiacées, Myorelaxants
- Produit de contraste
- Vancomycine
- Alcool

Autre mécanismes

- AINS
- Progestérone
- Sérum sickness

Effort physique

- Froid
- Vibration

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LES FACTEURS DE RISQUE & LES CO-FACTEURS

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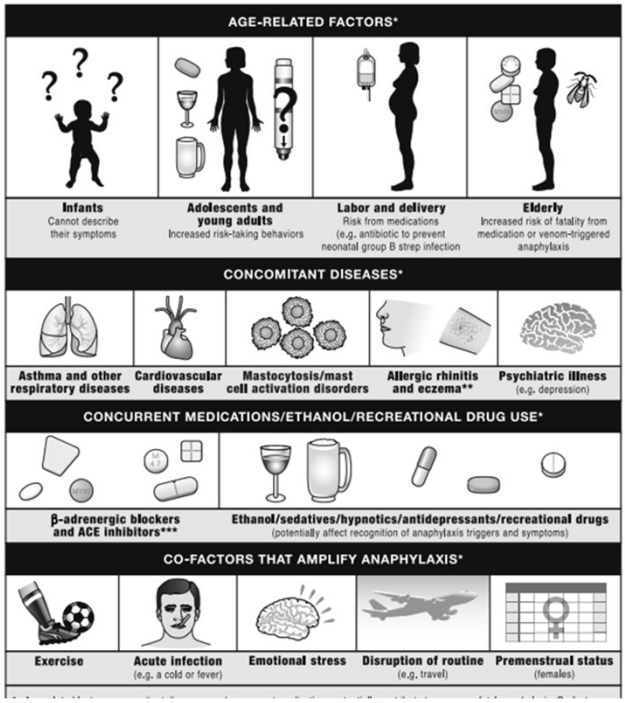

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LES FACTEURS DE RISQUE & LES CO-FACTEURS

l'effort physique	l'alcool	AINS	IEC
B-bloquants	l'adolescence l'âge avancé	état hormonal	les infections
stress	asthme et autres maladies IgE dépendants	maladies cardiovasculaires	mastocytose et/ou augmentation de la tryptasémie

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LES ALLERGIES ALIMENTAIRE

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L'EPIDEMIOLOGIE & LA PREVALENCE

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Frequency of FA	Age bands, years					
	≤ 1	2-5	6-10	11-17	18-60	> 60
POINT PREVALENCE						
Self-report	1.7 - 9.8%	1.6 - 38.7%	1.6 - 24.4%	1.6 - 24.4%	3.5 - 19.6%	3.3%
Positive IgE	19.4 - 20.3%	4.1 - 21.5%	4.1 - 52.0%	4.1 - 16.1%	2.0 - 21.9%	9.0 - 16.8%
Positive SPT	2.2 - 4.3%	3.2 - 4.5%	1.8 - 6.1%	1.8 - 6.1%	-	-
Symptom plus positive IgE	1.3 - 4.6%	4.6%	4.6%	4.6%	2.2%	2.2%
Symptom plus positive SPT	1.6 - 13.1%	13.1%	0.1 - 13.1%	0.1 - 13.1%	-	-
Clinical history or food challenge	2.7 - 3.0%	2.1 - 6.8%	1.1 - 2.1%	1.4 - 2.3%	-	-
Food challenge	0.3 - 4.2%	0.0 - 4.2%	0.4 - 4.2%	0.1 - 5.7%	0.1 - 3.2%	2.9%
LIFETIME PREVALENCE						
Self-report	5.7 - 38.4%	5.7 - 38.4%	5.7 - 41.8%	10.6 - 38.4%	9.5 - 35.0%	15.5 - 35.0%

Tableau récapitulatif cfr analyse de publications entre 1.1.2000 et 30.9.2012: 56 études et 75 publications

L'épidémiologie & prévalence

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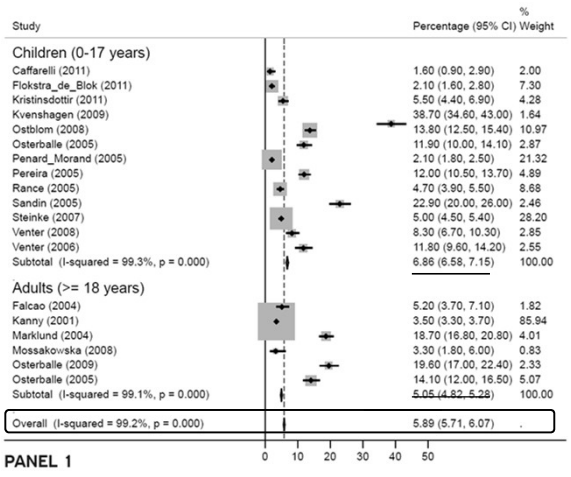

EAACI 2014

Prévalence

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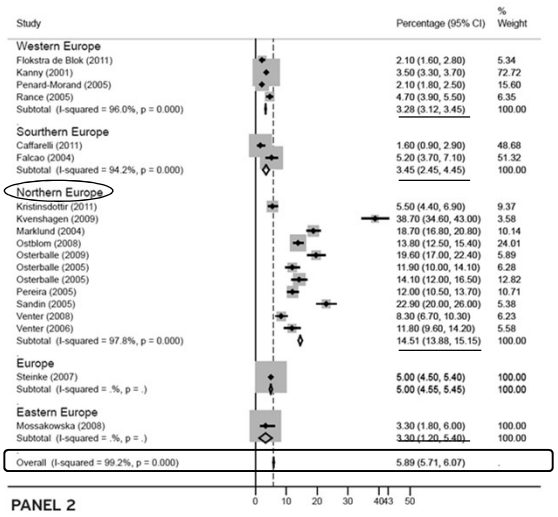

EAACI 2014

Prévalence

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	Prévalence cfr anamnèse	TPO +
Lait de vache	6 %	0.6 %
Œuf	2.5 %	0.2 %
Froment	3.6 %	0.1 %
Arachide	0.4 %	0.2 %
Noix	1.3 %	0.5 %
Poisson	2.2 %	0.1 %
Crustacées	1.3 %	0.1 %
Soja	1.5 %	0.3 %

- ! TPO + uniquement chez 10% des patients rapportant une allergie alimentaire

Prévalence

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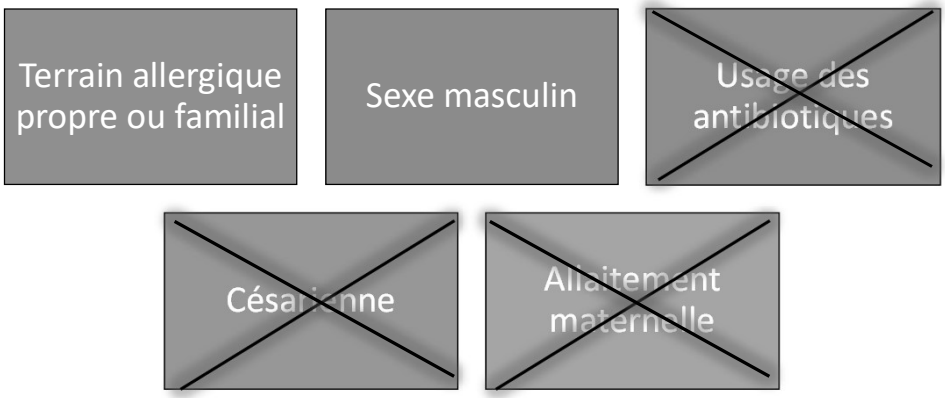
Facteurs de risque



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DE QUOI ON PARLE ?

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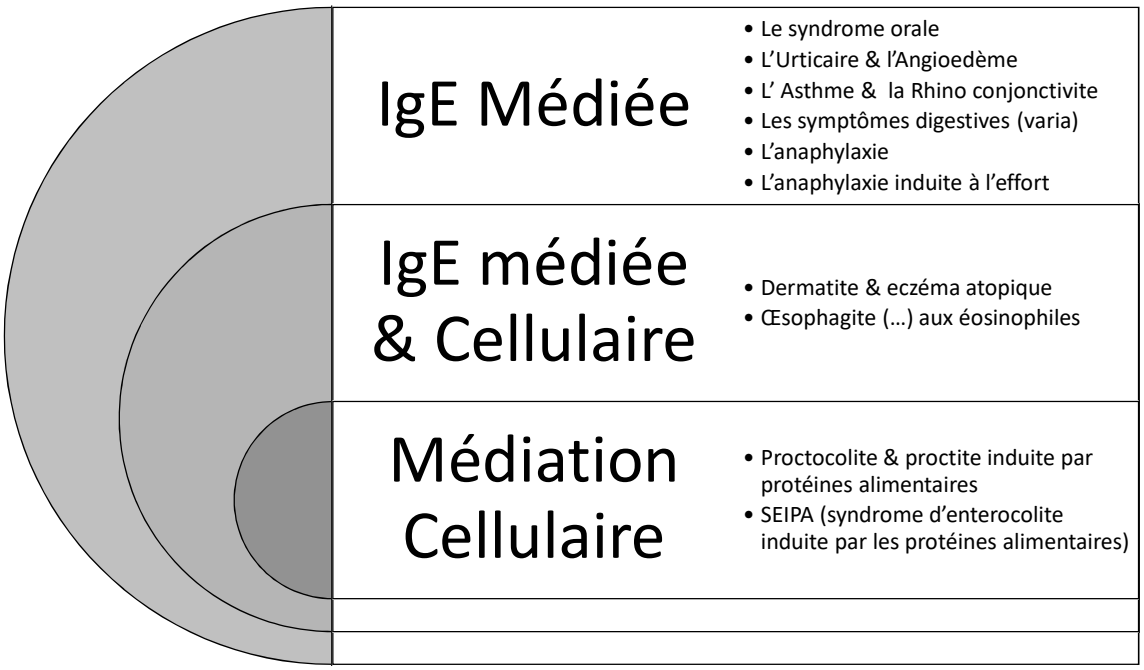

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EAACI

Food Allergy and Anaphylaxis Guidelines

EAACI 2014

Box 3 EAACI Recommendation on the diagnosis of food allergy

Recommendations	Evidence level	Grade	Key reference
A - PATIENT'S CLINICAL HISTORY			
Detailed clinical history is essential for the diagnosis of food allergy.	IV	D	Expert Opinion
When taking a clinical history eliciting allergens, timing and chronicity, symptoms, severity and signs, reproducibility, known risk (co) factors, family history, co-existing medical problems including other allergic diseases should be addressed.	V	D	Expert Opinion
The use of structured questions on symptoms, foods and other background information is recommended.	V	D	Expert Opinion
B - DETERMINATION OF SENSITIZATION TO FOOD			
Where available, standardized tests and procedures should be used.	IV	D	Expert Opinion
IgE sensitization does not always predict clinical relevant food allergy, so specific allergy testing should be directed by case history.	IV	C	(9)
Either SPT or sIgE can be the test of choice for sensitization depending on local availability and absolute and relative contraindications to SPT.	IV	C	(9)
Evidence of IgE sensitization to common food and appropriate aeroallergens can support a diagnosis of food allergy in conjunction with clinical history and/or food challenge.	I-III*	A-C	(9)
In the presence of a suggestive history, a negative SPT or sIgE needs to be interpreted with caution particularly as these are expected in non-IgE mediated food allergy.	IV	C	(9)
Where SPT and sIgE tests are inconclusive, CRD (if available) may provide additional diagnostic information.	I – IV*	A – C*	(9, 28-30)
If clinical history with SPT and/or sIgE results is not highly predictive (see Figure 1), an OFC is required.	IV	D	Expert Opinion
Determination of total IgE is particularly useful in patients with severe eczema; a very high total IgE level suggests that positive specific IgE results should be interpreted with care as they may represent asymptomatic sensitization.	IV	D	Expert Opinion
C - ELIMINATION DIETS FOR DIAGNOSTIC PURPOSES			
Determining which foods to be avoided should be based on the allergy-focused diet history, clinical history and allergy testing (SPTs and/or sIgE).	V	D	Expert Opinion
For each individually avoided food, the results of the diagnostic elimination diet should be carefully monitored and evaluated over 2-4 weeks of avoidance.	V	D	Expert Opinion
Where the elimination diet leads to a significant relief of symptoms, it should be continued until the provocation test is performed.	V	D	Expert Opinion
Where the elimination diet does not lead to a significant relief of symptoms, food allergy to the eliminated foods is highly unlikely.	V	D	Expert Opinion

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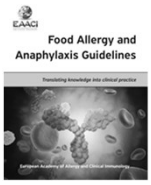

When taking a clinical history eliciting allergens, timing and chronicity, symptoms, severity and signs, reproducibility, known risk (co) factors, family history, co-existing medical problems including other allergic diseases should be addressed.	V	D	Expert Opinion
The use of structured questions on symptoms, foods and other background			

- Explorer le **terrain allergique**
- Les symptômes:
  - La chronicité
  - La séquence
  - La sévérité
  - La reproductibilité
- Les **CO-facteurs**
- Les antécédents médicaux & familiaux; le traitement habituel.

L'ANAMNESE

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LES AINS

L'EFFORT PHYSIQUE

L'ALCOOL

LES IPP

LA MASTOCYSTOSE

autre: fièvre, infection,

LES COFACTEURS

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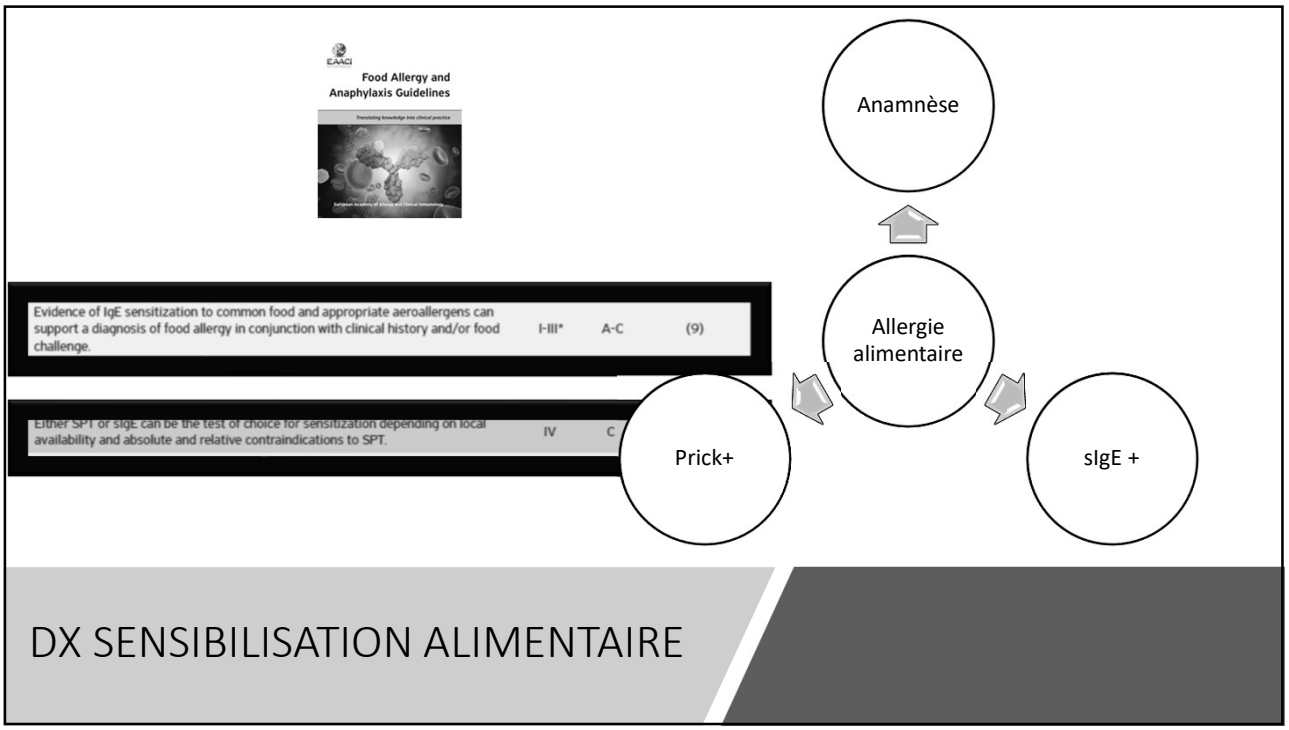
Food Allergy and Anaphylaxis Guidelines
Evidence of IgE sensitization to common food and appropriate aeroallergens can support a diagnosis of food allergy in conjunction with clinical history and/or food challenge. I-III* A-C (9)
Either SPT or sIgE can be the test of choice for sensitization depending on local availability and absolute and relative contraindications to SPT. IV C
Anamnèse
Allergie alimentaire
Prick+
sIgE +
DX SENSIBILISATION ALIMENTAIRE

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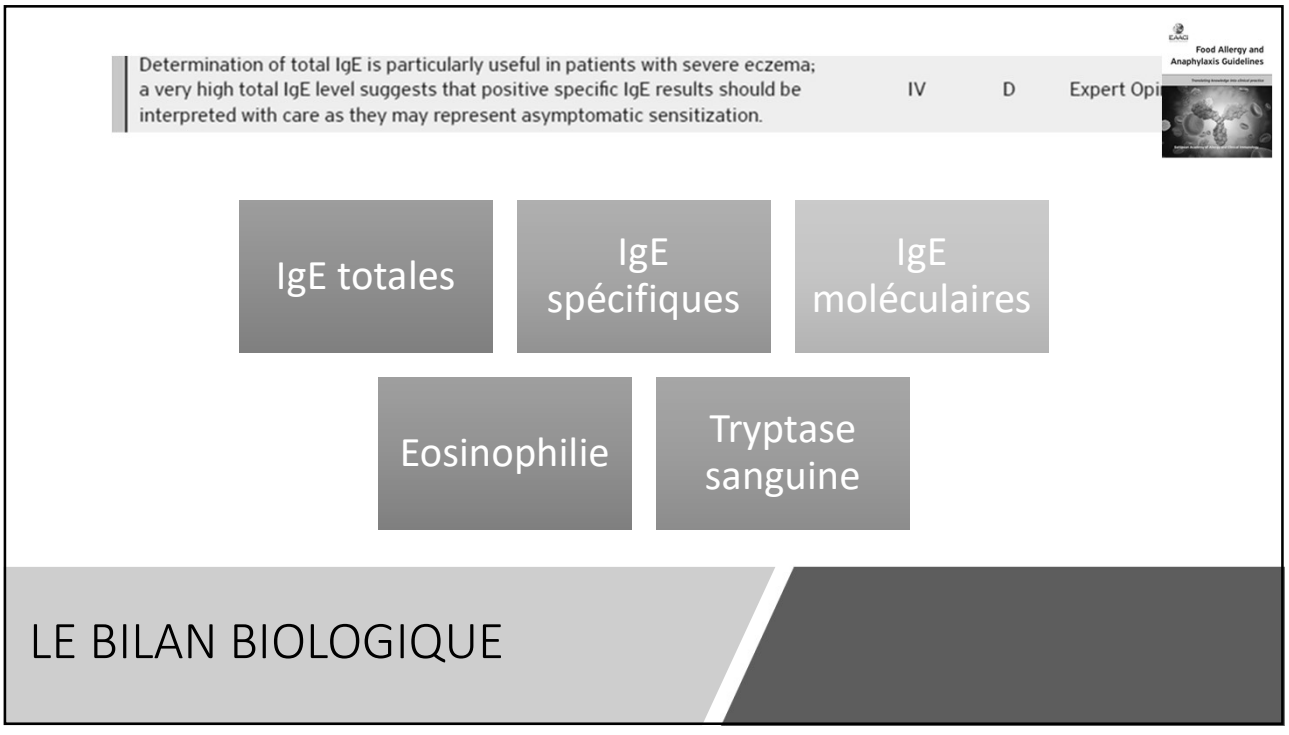
Determination of total IgE is particularly useful in patients with severe eczema; a very high total IgE level suggests that positive specific IgE results should be interpreted with care as they may represent asymptomatic sensitization. IV D Expert Opi
Food Allergy and Anaphylaxis Guidelines
IgE totales
IgE spécifiques
IgE moléculaires
Eosinophilie
Tryptase sanguine
LE BILAN BIOLOGIQUE

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	Prick	sIgE
Lait de vache	88 (68)%	87 (48)%
Œuf	92 (58) %	93 (49) %
Froment	73 (73) %	83 (43)%
Arachide	95 (61) %	96 (59) %
Soja	55 (68)%	83 (38)%

Diagnostique: sensibilité (spécificité) vs TPO

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INTERPRETATION DES DOSAGES

- *IgE + = SENSIBILISATION*
- *CLINIQUE & IgE+ = ALLERGIE*
- IMPORTANCE DE LA **CLINIQUE +++**
- **Le taux d'IgE n'est pas proportionnel au risque de gravité**

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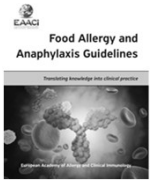

- Le TPO = l'outil idéal & ultime dans le Dx alimentaire
- TPO double aveugle
- Milieu hospitalier avec USI en proximité

Recommendations	Evidence level	Grade	Key reference
D - ORAL FOOD CHALLENGE (OFC)			
The OFC (particularly the double-blind placebo-controlled food challenge) is the gold standard investigation for the objective diagnosis of IgE-and non-IgE mediated food allergy.	IV	D	Expert Opinion

LE TEST DE PROVOCATION ORALE

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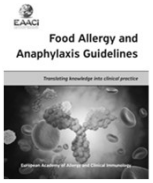

F - UNCONVENTIONAL TESTS, INCLUDING SPECIFIC IgG TESTING			
There are no unconventional tests which can be recommended as an ~~alternative~~ or complementary diagnostic tool in the work up of suspected food allergy, and their use should be discouraged.	III	C	(54)

Aucune valeur diagnostique des bilan IgG dans l'allergologie alimentaire.

Quid pour les bilans IgGs ?

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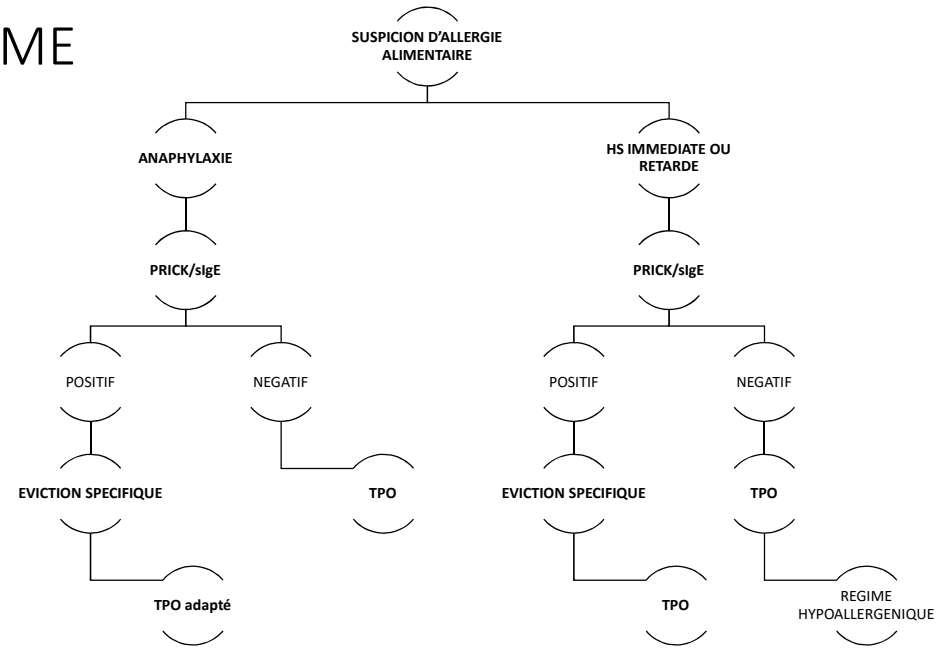
L'ALGORYTHME DX



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Victor 38 ans

- Anaphylaxie grade 4 (urticaire + choc anaphylactique)
- 30' avant avait consommé des fruits secs incluant des noisettes

- Prick: + crevette et +noisette
- IgE: Noisette +
- rIgE : rCor A1 (PR10)

- Avait prise 1 cp de Felden (tendinite)
- Dort pas car petite fille (…)

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Amaury, 28 ans, anaphylaxies à répétition

- Rhume des foins (ITS injectable de 2005 à 2009)
- 2010 (20 ans): durant un jogging en août vers 15h, éternuements en salve, puis gonflement des yeux, urticaire généralisée, difficultés respiratoires, vertiges; rentre chez lui difficilement, s'écroule sur son lit, quasi syncope (TA 8/.)
- A mangé des pâtes aux tomates à midi
- Biologie: IgE totales 146; IgEs: blé (froment) 6.38, soja 5.54, armoise 6.35, tomate 7.98; rPru p3 (LTP) 1.84 kU/l
- Conclusion: anaphylaxie alimentaire favorisée par l'effort, sans doute par "syndrome LTP"; trousse d'urgence avec EpiPen, éviter le sport après repas contenant des LTP...

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Amaury, 28 ans, anaphylaxies à répétition (suite)

- (2010) Fume 15-20 cig/j, et un peu de cannabis...
- 2010-2015: rien à signaler, continue le sport et ses études (marketing)
- Revu en 2018: à nouveau plusieurs épisodes d'anaphylaxie:
  - Course à pied après avoir mangé une pomme
  - Marche rapide par temps chaud après jus de fruits mixtes pressés
  - Bio: tomate 7.65, kiwi 5.54, rPru p3 5.06 et rMal d3 3.78 (LTP); rTri a14 (LTP du blé) négative <0.1 kU/l.
- Conclusion (2):
  - Syndrome LTP confirmé, mais pas toutes les LTP (pas le blé), et uniquement lors d'association avec effort; sans doute tomate la 1e fois en 2010
  - Possible déclenchement à cause du cannabis ! (Can s3 = LTP !)

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Questions:

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