

Test yourself in allergy diagnosis

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Choose only one answer:

1. Activated T cells induce death of a target cell by:

- a. Secreting perforin and granzymes
- b. Releasing pro-inflammatory cytokines including interferon- γ (IFN γ) and TNF α
- c. Activation of Fas receptors on the surface of target cells
- d. All of the above

2. Genetic risk factors for type 1 diabetes mellitus (T1DM) include all of the following except:

- a. CTLA4
- b. PTPN22
- c. ABBC8
- d. INS

3. Pathogenic mechanisms that trigger T1DM onset in genetically susceptible people, resulting in β -cell apoptosis and diabetes include all of the following except:

- a. IL-10
- b. NF-kappa
- c. IFN- γ
- d. TNF- α

4. You can find high serum levels of the following inflammatory markers in the newly diagnosed type 1 diabetes mellitus patients:

- a. IL-18
- b. CXCL9
- c. IFN- γ
- d. All of the above

5. All of the following autoimmune Th1 diseases are associated with type 1 diabetes mellitus except:

- a. Thyroiditis
- b. Celiac disease
- c. Eosinophilic gastrointestinal disorders
- d. Rheumatoid arthritis

6. All of the following sentences are true except:

- a. Th1 cytokine secretion and not Th2 is associated with the size of immediate hypersensitivity skin test to allergens and bronchial hyper-responsiveness in T1DM children.
- b. Atopic manifestations in children with chronic disease such as T1DM are most difficult to be diagnosed.
- c. Th1 cytokine secretion may either be pro- or anti-inflammatory in the same autoimmune disease.
- d. Allelic variation in the IL-13 gene is associated with IgE levels variance and atopic illness but has no detectable effect in type 1 diabetes.

7. The new paradigm identifies additional lymphocyte subsets between autoimmune as well as atopic diseases except:

- a. CTLA-4
- b. Th17 T cells
- c. Regulatory T cells (Treg)
- d. Soluble transcription factors

8. All of the following sentences are true about the link between atopic diseases and type 1 diabetes except:

- a. Children with diabetes had fewer symptoms of asthma as well as atopic dermatitis compared with the general population.
- b. Th1-mediated diseases may protect against the development of Th2-mediated atopic disease.
- c. Environmental factors interacting with the genetic profile of each patient is not related to the natural history of both the T1DM as allergic diseases.
- d. The parallel appearance of asthma and autoimmune conditions in the same patients may reveal aberrations of the immune system regulation instead of polarization towards Th1 or Th2 domination as a common pathophysiological mechanism.

(Answers on page 57)