

CONTINUING MEDICAL EDUCATION EXAMINATION

Genetics and Epigenetics of Nasal Polyposis: A Systematic Review

Instructions for obtaining 1.1 Continuing Medical Education Credits

Credits can be earned by reading the text and completing the CME examinations online throughout the year on the SEAIC web site at www.seaic.org



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CME Items

- Concerning the genetic aspects of CRSwNP, which of the following is true?
 - Current knowledge is vast, with comprehensive information about the genetics of the disease
 - Most of the available data come from candidate gene studies
 - NP affects individuals randomly, independently of their family background.
 - Several mutations in HLA genes have been identified as the only cause of NP
- Which of the following have been identified in the gene ontology pathway analysis as very relevant functional categories related to NP?
 - Response to stress
 - Interleukin 1 production
 - Cytokine regulation
 - Synthesis of extracellular matrix components
- Genes identified in the articles selected were associated in clusters. Which of the following statements about clusters is true?
 - Fanconi anemia genes were mainly associated with increased risk of NP
 - Genes for the Fcε receptor were associated with decreased risk of NP
 - The HLA cluster was found to be strongly associated with the cell surface receptor signaling pathway.
 - All of the above
- Which of the following statements about *IL1A* is true?
 - All polymorphisms described to date have been associated with an increased risk of NP
 - rs17561 was related to a reduced risk of NP
 - The -511C>T mutation was not significantly associated with NP
 - The protective effect of rs2856838 was enhanced with the homozygous form of the minor allele
- Regarding taste receptors and NP, which of the following is false?
 - According to differences in allele frequency between patients and controls, it can be concluded that most variations corresponded to *TAS2R* genes
 - The PAV/PAV genotype has been related to a lower frequency in American patients
 - Phenotype AVI in *TAS2R38* was significantly associated with the severity of the disease
 - TAS2R38* rs713598 corresponds to the replacement of C by G in 145
- Which of the following applies to *CFTR*?
 - It has been clustered with cyclooxygenase genes
 - A deletion in phenylalanine 508 is the most frequent mutation in Polish patients
 - It was undoubtedly associated with an increased risk of the disease in various cohorts
 - Ivacaftor was reported to be the most effective treatment for homozygous $\Delta F508$ patients
- Which of the following miRNAs show synergies with a higher number of relevant genes for NP?
 - miR-19a-3p
 - miR-668-3p
 - miR-199a-3p
 - miR-449b-5p
- Considering the gene clustering performed in the systematic review, which of the following biologicals would be more efficient for treating CRSwNP?
 - Alemtuzumab
 - Blinatumomab
 - Omalizumab
 - All of the above
- Which of the following has been identified as a limitation of the present systematic review?
 - Lack of information about the study population
 - Inappropriate statistical methods
 - Selection bias
 - Most genes have only been reported in 1 study
- Which of the following might be used as a biomarker to differentiate between CRSsNP and CRSwNP?
 - HLA-II*
 - TSLP*
 - miR-125b
 - All of the above