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Effect of age and CMV infection on NK cell subsets and phenotype

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The main topic of this lecture will be based on the current knowledge on age-associated phenotypic and functional changes in NK cells and the role of persistent CMV infection. It will be disclosed the key role of NK cells in the innate immune response against virus infection and tumors. Besides, attendees of this lecture will be familiarized with NK cell subpopulations based on CD56 and CD16 markers expression and the NK cell compartment remodeling in the elderly. As well, it will be shown how age and CMV infection have an effect on the expression of CD57, CD94/NKG2C, activating natural cytotoxicity receptors (NCRs, NKP30, NKP46) and DNAM-1. In summary it will be discussed how NK cell subsets and their phenotype in the elderly are affected not only by age but also by exposure to CMV and the relevance of including the determination of CMV serostatus in those studies addressed to analyze the effect of age on NK cell phenotype and function.

Biography

Pera performed her PhD studies at the Ramón y Cajal University Hospital (Madrid) and at the Università degli Studi of Milan, in 2009. Ever since, she has focused her work on Immunosenescence, particularly on the effect of CMV and age on NK and T cells' phenotype and function. She has authored several works regarding this topic this year. As well, she has collaborated recently with Dr. Larbi at the Singapore Immunology Network and currently has a Juan de la Cierva postdoctoral contract (Ministry of Science and innovation).

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