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THE ROLE OF MONOCYTIC MICROPARTICLES (mMP) IN ENDOTHELIAL CELL FUNCTION.

PENYELIDIK

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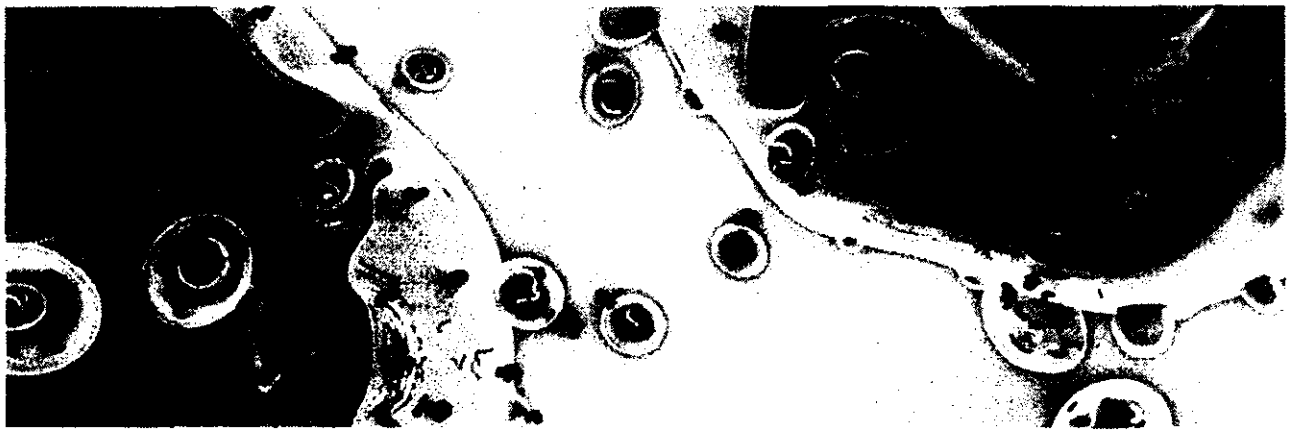

THE ROLE OF MONOCYTIC MICROPARTICLES (mMP) IN ENDOTHELIAL CELL FUNCTION

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Extracelluar vesicles/Immunology

ABSTRACT

Monocytic microparticles (mMP) are membrane-derived microvesicles released from activated or apoptotic monocytes. Monocytic MP are associated with inflammation and may play important role in endothelial cell function. The main aim of this study was to identify phenotypic profiles of mMP derived from THP-1, unseparated monocytes, $CD14^+$ monocytes and $CD16^+$ monocytes by flow cytometry and to identify the role of mMP in endothelial cell activation. Monocytic MP derived from unseparated monocytes, $CD14^+$ monocytes and $CD16^+$ monocytes but not THP-1 showed high expression of CD14 and CD16, secreted IL-1β and TNF-α and activated endothelial cells. Taken together our findings suggest that mMP derived from different cell types exhibit different phenotypes and functions. Future study of mMP is necessary to understand their mechanism of action.