Functional consequences of immune cell adhesion to endothelial cells

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Research regarding the interactions between the endothelium and immune cells has undergone a significant expansion during the past decade. Major shifts of emphasis have been the norm, from the production of a detail catalog of the cell surface receptors and counter-receptors acting at the interface between the vascular endothelium and circulating cells to a more mechanistic account of leukocyte/endothelium interactions. The past five years has seen new, groundbreaking developments in the field, with exiting studies aimed at understanding the functional consequences of the direct contact of endothelial cells and leukocytes. Based on early work to be discussed below, new data on local chemokine production and cell-to-cell contacts, attempt to clarify the physiopathological significance of these events. The exceptional anatomical arrangement of endothelial cells insures a permanent contact of the endothelium with leukocytes, an event likely to result in cellular signals originating from d