

Punctate Staining as Indirect Evidence for Microglial Ramification

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Microglia are finely ramified cells, uniformly distributed in the tissue of brain and spinal cord. Upon activation, they migrate towards the activating stimulus, dramatically changing their morphology. Their fine processes disappear, and the cells become ameboid. In the present study we demonstrate that in an immunohistochemical staining for microglia, the areas between activated cells become lighter, compared to the noticeable presence of immunoreactive puncta around quiescent cells. This can be interpreted as an evidence for the presence of extremely fine microglial processes around resting cells, which are lost following activation.

Key words: microglia, cell processes, activation, immunohistochemistry