

MIGRATION AND ELIMINATION OF BRAIN MACROPHAGES DURING RECOVERY.
AN ELECTRON MICROSCOPY STUDY.

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It has been established the presence of phagocytic brain macrophages under pathological conditions or experimental lesions. During recovery, even though it has been suggested that brain macrophages can degenerate, revert to microglia or introduce into blood circulation, final destination of those cells remain uncertain however.

The present work was undertaken in order to clarify further fate of neural macrophages after they have removed debris. So, accurate injuries were made on brains of adult quails with aid of an Argon laser beam. Then, animals were killed at different time, brains removed and tissue slices containing lesioned areas processed for conventional electron microscope study.

Our observations denote that after phagocytic activity macrophages, which are replete of lipids and cellular remains, migrate to blood vessels assuming a globular form. Accumulation of large number of macrophages laden with phagocytic vacuoles occur at perivascular space, near the basal membrane. Soon afterwards macrophages can be observed in close relationship with endothelium and even enclosed in cytoplasm of vascular cells.

Result prove that at least some of the so-called brain macrophages re-enter into blood circulation crossing endothelial wall of brain vessels.