Blood vessels, particularly the capillaries, play an outstanding role in allergic reactions. In the capillaries, the basic exchanges between the blood and the body tissues take place. Substances dissolved in the blood come onto full contact mainly with capillary cells. The allergen contact with histiocytarian cells of the connective network which surrounds the capillary tube, does produce a transformation of those cells into elements of allergic reactivity, with histiocyte proliferation into lymphocytoid, monocytoid, plasmacytoid cells. Consequently, histiocytes of the capillary wall are the first reactive cells, which come into contact with blood-dissolved allergens. Pericapillary cell clusters, also lympho-plasma-monocytoid cells are an important site for antibody formation. In that site, the clash between allergens and antibodies takes also place, with the consequences which have been listed above.

Organ transplants between histo-incompatible subject are followed by biological reactions which produce the so-called rejection crisis. The proliferative movement starts mainly from capillaries, namely from the vascular location where the host’s blood comes into contact with pericapillary histiocytes. Such pericapillary histiocytes are the active elements of the histio-capillary unit, and the experimental and clinical investigations of tissue allergy point them out as playing the leading role in allergic reactivity, in their proliferative evolution into lymphomonocytoid cells.