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The processing of wound healing in the integument of the spider (*Pardosa astriger* L.Koch)

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If the epidermis of an animal is injured so that its continuity is destroyed, the surrounding cells multiply and spread over the wound until the gap is filled. Then their growth ceases. Therefore, wound healing is a process designed to prevent loss of fluids, restore isolating barriers, and eliminate remains of tissue and foreign bodies. The healing process involves short-term mechanisms tending to close the wound and slower reactions leading to tissue regeneration and elimination of tissue debris. The purpose of this work was to investigate the morphological aspects of wound healing process in the integument of the spider. All experiments were performed upon adult spiders, the experimental wounds were conveniently injured on the dorsal surface of the cephalothorax by puncturing with a needle. Four wounds were made on each animal in an experiment there were at least two animals with wound of the same age.

The wound was immediately filled by hemolymph which coagulate and tanned into a chemically resistant. In addition, the clots consist of hemocytes within 6 hrs.. A tissue response to injury has divided into two phases: the early reactions to wound healing, remodelling the integument. We observed wound healing ranged from 6hrs. (6 hrs., 12 hrs., 6 days, 10 days, 12 days, 14 days) to 20 days in age.

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Electron Microscopic Study on the Hemocytes of the Wolf Spider, *Pardosa Astrigera*

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The fine structure of the hemocytes in Wolf spider, *Pardosa astrigera*, is described and compared with that of similar cells in other spider species and insects. Five hemocyte types are identified in the hemolymph: prohemocyte, plasmatocyte, granulocyte, spherulocyte and adipohemocyte. Prohemocytes are small with a relatively undifferentiated cytoplasm. The nucleus is comparatively large and has a perinuclear space. Plasmatocytes and granulocytes are pinocytotic function in the hemolymph of the body. The plasmatocytes have some coated pits on the plasma membrane and well developed Golgi complex. The granulocytes appear sequence of events in the formation of coated vesicle from a coated pit on its plasma membrane. The spherulocytes are larger in cell size than other hemocytes. The spherules contain the flocculent materials and the helical structured materials, which are 220nm in length and 80nm in width. The adipohemocytes are oval shaped and have a number of lipid droplets.