Distribution of Histamine-Positive Mast Cells in the Vicinity of the Needle Tract Following Acupuncture in “Zusanli” (ST$_{36}$) Acupoint in Rats

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“Zusanli” (ST$_{36}$) acupoint is commonly used in acupuncture. The mast cells are important object in experimental acupuncture. Histamine is stored in the granules of rat mast cells. The aim of the present study is to examine the distribution of histamine-positive mast cells in the vicinity of needle tract following acupuncture in ST$_{36}$ acupoint in rats. Acupuncture in ST$_{36}$ disrupted the integrity of the epithelium, derma, subcutis, fascia, epimysium and striated muscle tissue. In our research we observed thickening and displacement of the connective tissue in the direction of the needle tract and folding of the fascia. We noticed histamine-positive mast cells in the proximity of needle tract in the tissues of ST$_{36}$ acupoint in rats. We could not establish considerable differences in the number and distribution of histamine-positive mast cells in the needle tract vicinity. Few histamine-positive mast cells in the proximity of the needle tract showed signs of degranulation.

*Key words*: mast cells, histamine, acupuncture, needle tract, Zusanli (ST$_{36}$).