

優秀発表賞応募講演 | 優秀発表賞応募講演

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2019年9月18日(水) 09:30 ~ 11:00 第III会場 (2番講義室)

III-YS-01~III-YS-03 : 井上 慶一、澤井 健

III-YS-04~III-YS-06 : 有原 圭三、一條 俊浩

09:45 ~ 10:00

[III-YS-02]Proliferation and hypertrophy of hepatocytes during pregnancy in mice

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In humans, it has been reported that embryo implantation can occur in not only the uterus but the liver and some healthy babies were born via liver pregnancy. This evidence suggests that hepatocytes and endometrial cells have a common signal for embryo implantation. Although uterine endometrial cells differentiated into decidual cells, kinetics of hepatocytes are not well known. We examined changes of hepatocytes during pregnancy in mice.

After mating, the presence of a vaginal plug was defined as day 1 of pregnancy, and liver tissues were collected from day 1 to day 18 of pregnancy. The liver weight, volume and numbers of hepatocytes were examined and the tissues were stained by HE and IHC.

The liver weight and volume of hepatocytes were increased during pregnancy. Ki67 positive cells were observed in hepatocytes beyond day 18. In addition, expression of hepatocyte growth factor and the receptor, c-Met (both were essential for liver regeneration) were low.

Our data suggest that liver weight is dramatically increased during pregnancy due to proliferation and hypertrophy of hepatocytes. The change is occurred by the different mechanism from liver generation.