

عنوان مقاله:

Immunohistochemical assessment of galectin-3 during pre-implantation in mouse endometrium

محل انتشار:

مجله طب تولید مثل ایران، دوره 11، شماره 2 (سال: 1392)

تعداد صفحات اصل مقاله: 8

نویسندگان:

Mahmoud Orazizadeh - *Cellular and Molecular Research Center (CMRC), Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran.. Department of Anatomical Sciences, Faculty of Medicine, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran*

Layasadat Khorsandi - *Cellular and Molecular Research Center (CMRC), Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran.. Department of Anatomical Sciences, Faculty of Medicine, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran*

Ghasem Saki - *Department of Anatomical Sciences, Faculty of Medicine, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran*

خلاصه مقاله:

Background: Galectin-3 (Gal-3), a β -galactoside-binding lectin, is a multifunctional lectin that involves in a number of critical biological processes. Objective: The purpose of this study was to investigate the expression pattern of Gal-3 in mouse endometrium during estrus phase of estrous cycle and pre-implantation. Materials and Methods: In this experimental study 42 NMRI female mice were divided in seven different groups. Ovulation in NMRI female mice was stimulated by injecting hMG and hCG. Estrus phase was considered as stimulated and un-stimulated groups. The other groups of mice were mated, and the day of vaginal plug formation was considered as the day 1 of pregnancy. The mice of all groups were sacrificed on different days of pre-implantation period and their uterine horns were fixed and avidin- biotin complex method of immunohistochemistry (IHC) was applied. Results: In estrus group, Gal-3 immunoreactivity in luminal epithelium was strong, in stromal cells very strong, in glandular epithelium very weak and endothelial cells very strong. No identifiable difference was observed in un-stimulated and stimulated estrus phase. In test groups, days 1-2, insignificant difference of Gal-3 expression was observed. On day 3, luminal epithelium and stromal cells showed significant decrease in comparison to estrus and day 1 ($p=0.001$). On the 4th and 5th days, luminal epithelium and stromal cells showed significant decrease in comparison to estrus phase and days 1-3 ($p=0.0001$). Conclusion: The data suggested that successful implantation is probably associated with the downregulation of Gal-3 in the mouse endometrium at the beginning of pregnancy.

کلمات کلیدی:

Endometrium, Estrus phase, Galectin-3, Preimplantation

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/488851>



