**FORM-5**

**CONGRESS APPLICATION FORM**

**SPECIFY THE NAME OF THE CONGRESS YOU WANT TO ATTEND**

**…………………………………..**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **TITLE OF THE PAPER / ENGLISH** | **NAME SURNAME** | **UNIVERSITY, FACULTY, DEPARTMENT** | **FIELD OF EXPERTISE** | **E-MAIL****ADDRESS** | **MOBILE TELEPHONE NUMBERS** | **CITY AND COUNTRY** | **ORCID ID** |
| HYDROCORTISONE CAN IMPROVE THE HISTOMORPHOLOGY OF TRANSPLATED RAT OVARIES THROUGH REDUCING OVARIAN NECROSIS AND INFLAMMATION | 1. | Ph.D., Merve KIDIRYÜZ | Health Sciences University, Hamidiye International Faculty of Medicine, Department of Histology and Embryology, Istanbul, Turkey | **Histology and Embryology** | **izdascon@gmail.com** | **+90 544 738 54 23** | Istanbul, Turkey | **0000-0000-0000-0000** |
| 2. | Assoc. Prof. Dr. Samet KUŞKIRAN | Health Sciences University, Hamidiye Faculty of Medicine, Department of Histology and Embryology, Istanbul, Turkey | **Histology and Embryology** | **pariskongresi@gmail.com** | **+90 544 738 54 23** | Istanbul, Turkey | **0000-0000-0000-0000** |
| 3. |  |  |  |  |  |  |  |
| 4. |  |  |  |  |  |  |  |
| 5. |  |  |  |  |  |  |  |

\* Please send your abstract in the same file with Form-5 to the congress e-mail address.

**\* ENGLISH ABSTRACT IS MANDATORY**

\*Papers should have a maximum of 5 authors. Studies with more than 5 authors will not be evaluated.

\*It is mandatory to include the contact details of all authors, mobile phone and e-mail address.

\*English abstract (even the title) is mandatory.

\*If you do not have an ORCID number, you can obtain it by registering from the link below.

 https://orcid.org/

**HYDROCORTISONE CAN IMPROVE THE HISTOMORPHOLOGY OF TRANSPLATED RAT OVARIES THROUGH REDUCING OVARIAN NECROSIS AND INFLAMMATION**

**Merve KIDIRYÜZ1**

1Health Sciences University, Hamidiye International Faculty of Medicine, Department of Histology and Embryology, Istanbul, Turkey

1ORCID ID: https://orcid.org/0000-0000-0000-0000

izdascon@gmail.com , +90 544 738 54 23

**Samet KUŞKIRAN2**

2Health Sciences University, Hamidiye Faculty of Medicine, Department of Histology and Embryology, Istanbul, Turkey2

2 ORCID ID: <https://orcid.org/0000-0000-0000-0000>

pariskongresi@gmail.com , +90 544 738 54 23

**ABSTRACT**

**Introduction and Purpose:** Inflammation, oxidative stress, and apoptosis are commonly acknowledged as the combined mechanisms that promote ischemic reperfusion sensitivity in transplanted ovaries, leading to organ damage. Therefore, we hypothesized that, HC injection before grafting could improve ovarian tissue from necrosis and inflammation. Therefore, the objective of the present study was to assess prevention of ovarian tissue from necrosis and inflammation after fresh ovary transplantation and evaluate the effectiveness of HC.

**Materials and Methods**: 15 adult female Wistar-Albino rats, which were found to be in the estrus phase by vaginal cytology follow-up, were divided into 3 groups. Group1: (n=5): Abdomen was opened, observed and closed. Group2: (n=5): Left oophorectomy was performed after abdomen was opened. Group3: (n=5): 50 mg/kg/i.p. HC (Group 3, n=5) was applied, before abdomen was opened and left oophorectomy was performed. In histopathological examinations; tissue necrosis and inflammation were evaluated in the preparations. Ordinal scale was created for the histopathological examinations (none=0 points, slightly present=1 point, present= 2 points, markedly present=3 points). Kruskal Wallis variance analysis was employed in the comparison including all groups.

**Results:** The ovarian inflammation and necrosis were found to be highest in transplantation group (p<0.05). The comparison including all groups revealed that tissue necrosis and inflammation were unfavorably affected in HC-treated group.

**Discussion and Conclusion:** The current study has demonstrated that short-term pre-treatment of rats with HC before transplantation could preserve the ovarian function in terms of ovarian tissue histological evaluations. In conclusion, application of HC before fresh whole ovary transplantation was found to be effective in controlling the formation of necrosis and inflammation in ovarian tissue in rats.

**Key Words:** Ovary Transplantation; Hydrocortisone; Inflammation; Necrosis; Histopathology