Objective: The aim of this study is to examine the effect of human recombinant leukemia inhibitory factor in different doses on rate of fertilization of mouse oocytes.

Interventions: Mice were sacrificed at 12-14 hours after hCG or 36-38 hours after hMG injection. Mature oocytes were obtained and divided randomly into 5 groups. Oocytes in group A (n=157) were cultured as the control group in TYH medium. Oocytes in groups B, C, D, E (n=137, 154, 166 and 159, respectively) were cultured in the same medium supplemented with recombinant human leukemia inhibitory factor in four different concentrations (5, 7.5, 10, 20ng/ml, respectively) for 1 hour. After that time, 100.000 spermatozoa were added to every drop and after 24-26 hours, two cell embryos were recorded. Fertilization was assessed by recording the number of 2-cell embryos and analysed by X2 tests.

Main outcome measurement: Two cell embryos.

Results and Conclusion: No significant difference was detected in the rate of two cell embryos in the studied experimental groups as compared with the rate of two cell embryos in control group (Group A). This study showed that, different concentrations of recombinant human leukemia inhibitory factor in standard medium does not enhance the in vitro fertilization rate of mouse oocytes.

P-66

SERUM GAMMA-GLUTAMYLTRANSFERASE IN RHEUMATOID ARTHRITIS

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Objective: Rheumatoid arthritis (RA) is a chronic inflammatory disease, and oxidative stress plays an important role in its etiopathogenesis. It has been shown that gamma-glutamyltransferase (GGT) is upregulated after oxidative stress through the Ras signal transduction pathway and can be used as a marker related with oxidative stress. The aim of our study was to investigate the serum GGT levels in RA patients.

Methods: 76 patients with RA (24 men and 52 women) were included in this study. 64 patients with generalized anxiety disorder (25 men and 39 women) were used as a control group. Serum GGT levels were determined in all participants.

Results: We found that serum GGT levels were significantly higher in RA patients (mean 48.0 ± 40.7 IU/L) compared to control group (mean 20.4 ± 12.7 IU/L) (p<0.0001). There was no significant difference between men (mean 40.9 ± 27.5 IU/L) and women (mean 51.3 ± 45.4 IU/L) in patients with RA (p>0.05).

Conclusions: These results may be useful in understanding the role of oxidative stress in RA. However, further studies are needed to assess the importance of GGT increase in RA.

P-67

THE INVESTIGATION OF IL-1 β GENOTYPE ON PATIENTS TREATED WITH OSTEOINTEGRATED DENTAL IMPLANTS

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In our study, we aimed to investigate the relationship between Interleukin-1β (IL-1β) +3953 gene polymorphism and smoking in osteointegrated dental implant losses. 56 implanted cases and 40 healthy control subjects were included; polymerase chain reaction, restriction fragment length polymorphism and agarose gel electrophoresis techniques were used and IL-1β+3953 polymorphisms were investigated. IL-1β+3953 genotype distributions were similar in both groups. There were no statistically significant relationships between age, plaque index, pocket depth size, smoking and level of implant losses in IL-1β positive patient group (p>0,05). Three of the five patients that were having implant loss, were smokers, losing the implant earlier and having higher average plaque and bleeding indexes. As a result, we can hypothesize that being IL-1β positive and smoking can affect implant loss, but the study group must be increased to obtain statistically significant results.

P-68

PLASMA ACYLATED GHRELIN, OBESTATIN AND LEPTIN IN DIFFERENT STAGES OF CHRONIC KIDNEY DISEASE PATIENTS

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Objective: Malnutrition and loss of appetite remain a frequent problem in patients with chronic kidney disease (CKD). These patients have inflammation accompanied by high levels of plasma leptin, an appetite-modulating hormone. A newly described hormone ghrelin is also involved in regulation food intake and energy balance. In patients with end-stage renal disease and hemodialysis, high plasma ghrelin concentration has been reported, but the metabolic impact of ghrelin in CKD is unknown. The aim of this study was to characterize the changes in circulating levels of ghrelin, obestatin, leptin, interleukin (IL)-6, and tumor necrosis factor-alpha (TNF-a) at different stages of CKD.

Materials and Methods: 37 hemodialyzed (HD) patients (23 men, 14 women, mean age 37.6±2.28 years, mean BMI 22.5 ± 0.7 kg/m2); 42 peritoneal dialyzed (PD) (23 men, 19 women; mean age 42.6 ± 2.03 years, mean BMI 23.6 ± 0.5 kg/m2) and 37 early stage CKD patients (24 men, 13 women; mean BMI 24.6 ± 0.5 kg/m2) were studied. The control group consisted of 31 healthy subjects (14 men, 17 women; mean age 38.4 ± 1.7 years, mean BMI 24.6 ± 0.5 kg/m2). Leptin, acylated ghrelin, obestatin and cytokine determinations were done by commercially available ELISA kits.

Results: The patients with CKD had significantly higher serum leptin but lower acylated ghrelin levels than the controls. The level of these hormones in dialysis patients did not differ from those in early-stage CKD. TNF-α and IL-6 levels were significantly higher in CKD patients than in controls, the highest levels being present in dialysis patients. Obestatin levels were relatively lower in HD patients.

Conclusion: Low acyl-ghrelin levels observed in CKD patients may be involved in the loss of appetite and poor nutritional status. The high levels of TNF-α and IL-6 indicate the presence of chronic inflammatory state.

P-69

FATTY ACID COMPOSITION OF HDL IN RENAL TRANSPLANT RECIPIENTS TREATED WITH CYCLOSPORIN/TACROLIMUS

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Objective: Atherosclerotic cardiovascular disease is the leading cause of morbidity and mortality in patients with end-stage renal disease receiving renal replacement therapy. It is known that the concentration of cholesterol in HDL is an inverse predictor of future atherosclerotic cardiovascular disease. The aim of our study was to investigate the alterations of HDL fatty acid levels to evaluate oxidative stress in renal transplant recipients receiving Cyclosporin (CsA) and Tacrolimus (FK506).

Materials and Methods: Renal transplantation patients treated with CsA (n=6) and FK506 (n=10) were studied and the samples were collected before transplantation (BT), at the 60th (AT60) and 120th day (AT120). Six healthy donors formed our control group. Fatty acid composition analysis was performed on Agilent 6890N gas chromatography. Non oxidized fatty acid levels were measured. Therefore, the decrease in fatty acid levels defines the increase of oxidized amounts.

Results: In FK506 group, the levels of C16:0 increased significantly at AT60 compared to control and BT. C18:3 and C20:4 decreased significantly compared