complementary treatment, with low calorie diet on weight loss and leptin hormone level, in Iranian overweight and obese subjects.

**Materials and methods:** In the study subjects were approached on the overweight and obese persons, aged between 18 and 55 years with body mass index (BMI) between 26 and 45 kg/m² and who had medical history without drug history within the last 3 months. The subjects were randomly (by case to case option) divided to two groups. The case group (n = 43, female = 33, male = 10) received Electro Acupuncture with low-calorie diet, and the control group (n = 43, female = 33, male = 10) received sham Electro Acupuncture with low-calorie diet. All subjects were asked to receive twice treatments each week for 6 weeks and needles were kept on the body for 20 min in each time. Body weight, BMI, body fat mass and leptin hormone were measured two times in all subjects (first: at the beginning of study, second: 1 day after treatment).

**Results:** Body weight and BMI decreased significantly (p < 0.001) in both the case and control groups but the difference of these factors between two groups was not statistically significant (p > 0.1). For body fat mass and leptin hormone, in the case group it was observed that there was a significant reduction in the two variables (p < 0.001, p < 0.001), respectively and in the control group significant reduction in body fat mass (p < 0.005) and leptin hormone (p < 0.01) was observed. The difference of these factors between the two groups was not statistically significant in body fat mass (p > 0.1) and was significant in leptin hormone (p < 0.03).

**Conclusion:** This study found no statistical difference in body weight and BMI (mean ± S.D.), between the two groups. Electroacupuncture may have potential benefit on body fat mass and leptin hormone.

**Keywords:** Electro acupuncture, Obesity, Overweight, Body weight, BMI, Body fat mass, Leptin hormone

doi:10.1016/j.clinbiochem.2011.08.301

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**Poster – [A-10-95-1]**

**Evaluation of Melatonin effects on some biochemical parameters in rainbow trout (onorculynshus mykiss)**

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**Introduction:** Much of melatonin in special nerve cells (pineal) to a small gland in the center of the brain is made. Dark strengthen and intensify construction of melatonin and light, it will prevent the discharge. The purpose of this experiment was to determine the effect of long-term low-dose administration of Melatonin (MLT) as an antioxidant in fish.

**Materials and Methods:** In this study, 100 rainbow trout weighing number of 60 to 70 grams, were randomly allocated into the control (n = 45) and Melatonin (MLT) - treated (n = 45) groups. They were distributed and spent a week to become compatible with the environment. To ensure the health of fish parasites and microbial assay in a number of them were done. To achieve the designed goals during the testing of a particular type of diet for each of the two groups were used. The first groups 10 mg/kg MLT to their dry food (3% body weight) added (4 weeks) and for the control diet is considered normal. Both groups were kept under identical conditions in terms of food and environment. Blood samples were drawn between the hours of 08:00 and 09:00 from the both groups on days 0, 7, 14, 21 and 28. Anti oxidant effect was evaluated by measuring the levels of the serum glutathione peroxidase, (GPX) Superoxide dismutase (SOD), Malondialdehyde (MDA) and catalase. Hepatic function was evaluated in both groups by measuring alanine aminotransferase (ALT), aspartate aminotransferase (AST).

**Results:** MLT increased activity of antioxidative enzymes and decreased peroxidation of lipids, when compared to the control group (p < 0.05).

**Conclusion:** It was concluded that MLT administration have antioxidative effects.

**Keywords:** Melatonin, Biochemical parameters, Rainbow trout

doi:10.1016/j.clinbiochem.2011.08.303
12th Sep. 2011

To whom it may concern,

This is to correct the miswriting occurred due to technical errors during submission and/or preparation of the following abstract published in *Clinical Biochemistry, Volume 44, Issue 13, Supplement, September 2011* as the abstract book of the 12th Iranian Congress of Biochemistry and 4th International Congress of Biochemistry and Molecular Biology held on 6-9th Sep. 2011 in Mashhad, Iran.

Abstract code: A-10-95-1

Page number in which the abstract was appeared: 128

Abstract title: Evaluation of Melatonin effects on some biochemical parameters in rainbow trout (oncorhynchus mykiss)

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We do apologize for any kind of inconvenience caused by this matter.

Seyed Mohammad Reza Parizadeh

Scientific Secretary of the Congress

Majid Ghayour Mobarhan

Executive Secretary of the Congress
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This is to certify that: Hamideh Ghodrati Azadi

Title of presentation: Evaluation of Melatonin effects on some biochemical parameters in rainbow trout (Oncorhynchus mykiss)

Held a Poster Presentation at the

12th Iranian Congress of Biochemistry & 4th International Congress of Biochemistry & Molecular Biology

Mashhad, Iran

6-9 September 2011

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