Turkey has a higher BMI score for females compared to Bosnia and Herzegovina, but the difference is only 1.9 points in BMI scores. Both countries fall into the average weight category in the index which is above underweight and above overweight and obese category. Total fertility rates of Turkey and Bosnia and Herzegovina show that Turkey has 0.86 higher fertility rates in average when compared with Bosnia and Herzegovina from year 2011 to 2014.

The lower fertility rates may be due to the negative agents on the adults but also post-war trauma on Bosnians. The pronounced reduction in fertility can be linked to particular circumstances in Bosnia and Herzegovina following the war and subsequent economic stagnation and instability accompanying changes in societal behavior.

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A Rare Cause of Obesity: ROHHAD Syndrome

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ROHHAD syndrome is a rare syndrome with rapid-onset obesity (RO), hypoventilation (H), hypothalamic (H), and autonomic dysfunction (AD). Rapid weight gain usually begins after the age of 2-3, while hypoventilation occurs in more advanced age. We report the case of a patient who developed hypoventilation at very early age and subsequently obesity, and was diagnosed at the age of 1.5 years.

A male patient developed progressive neurologic deterioration and epilepsy following hypoxic encephalopathy due to sudden respiratory arrest at five months old. At the age of 1.5, he was evaluated for sudden-onset obesity which occurred in the last few months. He received treatment for constipation as well as epilepsy. The weight was 15 kg (+1.4 SD), height 82 cm (-1.0 SD), and BMI 22.3 kg/m^2 (+3.1 SD). Spontaneous breath rate and heart rate were varying between 6-10/min and 45-55/min, respectively. The patient was spastic quadriplegic and had no pupillary reflex. Brain MRI revealed cortical and white matter atrophy. Laboratory values were as follows: serum Na 150 mEq/L, serum osmolality 310 mOsm/kg and urine osmolality 101 mOsm/kg, serum adrenocorticotropic hormone <5 pg/mL, and cortisol 1.01 µg/dL. Other pituitary functions were normal. Treatment with desmopressin and hydrocortisone was initiated for central diabetes insipidus and adrenal insufficiency. All the findings (obesity, pituitary hormone deficiencies, hypoventilation, bradycardia, absence of pupillary reflex, constipation) indicated diagnosis of ROHHAD syndrome.

ROHHAD syndrome should be kept in mind in children with rapid-onset obesity and pituitary hormone deficiencies. These children should be monitored in terms of accompanying findings such as hypoventilation and autonomic dysfunction.

(P-29)

Osteogenesis Imperfecta: Case Report

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Osteogenesis imperfecta is a genetic disorder characterized by osteoporosis, recurrent bone fractures and, consequently, deformities. In many cases, it is chiefly caused by a dominant mutation in the *COL1A1* or *COL1A2* genes that encode type I procollagen.

The medical history of our 41-year-old female patient revealed an earlier diagnosis of osteogenesis imperfecta and 4 fractures. She was diagnosed with the disease in her childhood. She was treated with zoledronic acid twice, once per year. In the clinical examination, she reported that she had no new fractures and her pain reduced after zoledronic acid treatment. Blue sclera was present in her physical examination .The laboratory results were as follows: AST 20 U/L, ALT 22 U/L, ALP 81, Ca 8.8 mg/dL, P 3.0 mg/dL, 25 OH vitamin D 35 ng/mL, TSH 0.995 µIU/mL, fT_4 1.26 ng/dL, and PTH 40.81 pg/mL. Before zoledronic acid treatment, DEXA lumbar total T score was -2.9 and Z score was -2.7. One year after the second zoledronic acid administration, DEXA lumbar total T score was -2.5 and Z score was -2.2. The patient was treated with zoledronic acid for the third time by our team.

The target of the treatment of the cases with osteogenesis imperfecta is to reduce the fractures and pain and to prevent long-term bone deformities thus improve the patient's functional capacity and mobilization. Recently, no new bone fractures have been observed in our patient treated with zoledronic acid. Bearing drug compliance in mind, zoledronic acid could be an alternative to bisphosphonate treatment for suitable patients with osteogenesis.