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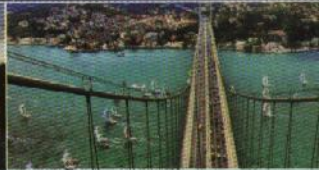
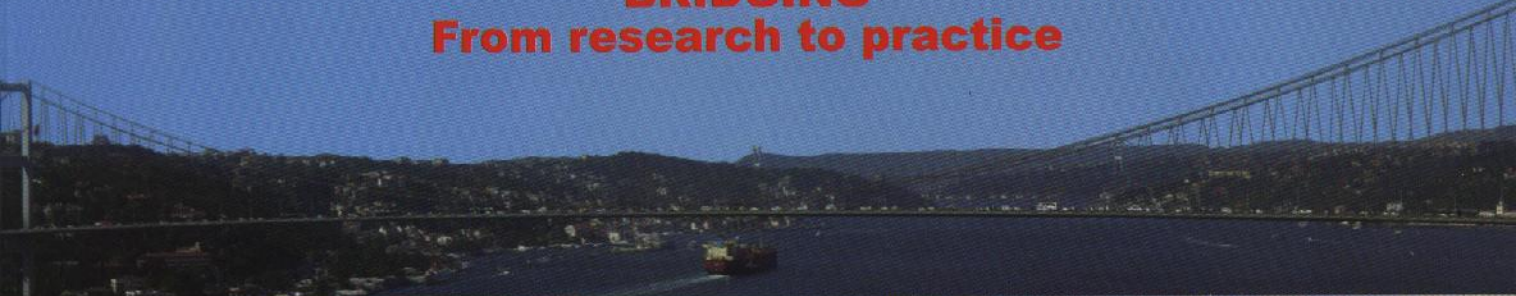
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ABSTRACT BOOK

PP-06.39

Argininemia presenting with progressive spastic diplegia

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OBJECTIVE: Argininemia, a rare autosomal recessive urea cycle disorder, is caused by a deficiency of arginase 1, with resulting elevated plasma arginine and ammonia levels. In contrast to other urea cycle disorders, hyperammonemic encephalopathy is rarely observed in patients with argininemia. It typically presents later in childhood between 2 and 4 years of age with progression of neurologic manifestations, including spastic diplegia. We describe 3 years-8 month old boy children with argininemia, manifesting as slowly progressive spastic diplegia.

METHODS: A 3 years-8 month old boy was admitted to our department with gait disturbance. On examination, his deep tendon reflexes were increased, and rigidity of both lower extremities. His findings was slowly progressive spastic diplegia. He had normal results of cranial and whole spinal magnetic resonance imaging and mild hyperammonemia. His blood and urine amino acid levels were analyzed. His blood arginine concentration was 454 mmol/L (normal range, 0-100 mmol/L), and his urinary excretion of arginine and orotic acid was increased.

RESULTS: The pathogenesis of neurologic disease in patients with argininemia is unclear. However, severe cerebral and motor neuron manifestations, including spasticity, appear to be related to hyperargininemia. Arginine and its metabolites, including guanidino compounds, may act as neurotoxins.

CONCLUSIONS: we conclude that argininemia should be considered more frequently in the differential diagnosis of a patient with slowly progressive neurologic manifestations, especially progressive spastic diplegia,

PP-06.41

Pedobaromethric measurement of muscle spasticity in children with cerebral palsy after the application of Extracorporeal Shock Wave Therapy

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OBJECTIVE: In the last three decades Extracorporeal Shock Wave Therapy (ESWT) is a method of treatment, which is widely used in the management of urological, orthopedics and different kind of muscle- skeletal disorders.

The aim of this study is to evaluate the effect of single session of ESWT applied on plantar flexors in children with cerebral palsy by foot scan measurement.

METHODS: Eleven children with cerebral palsy (spastic diplegia and hemiparesis) are included: 7 boys and 4 girls, mean age 4.72, SD 2.14. For pedobaromethric measurement a RS foot scan platform is used.

To all children a single session of radial shock wave therapy (RSWT) was applied on each gastrocnemius and soleus muscles. They receive 1500 shots per muscle. For evaluation of the results a foot scan platform was used. The measurement included a static and dynamic analysis: maximum pressure on the heel [N /cm²] and a change in the total contact plantar surface.

RESULTS: Immediately after the procedure a significant decrease in the muscle spasticity was observed. The maximum pressure on the heel increased from 50.47, SD 27.2 to 75.17, SD 14.1 The total plantar contact surface increase from 81.32 SD 25.32 to 101.58 SD 22.31.

CONCLUSIONS: Radial shock wave therapy could be an appropriate method for decreasing muscle spasticity of plantor flexors in children with cerebral palsy. Further more investigation is needed to clarify the effect and the advantages of this treatment.

PP-06.42

Locking plate fixation for proximal femoral osteotomies of cerebral palsied children

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OBJECTIVE: Evaluation of new anatomic locking plates in the use of proximal femoral osteotomies of cerebral palsied children.

METHODS: With the average follow up period of 13.2 months, the advancement in the clinic and radiologic parameters and implant related conditions, of 12 cerebral palsied children whom had a proximal femoral osteotomy with locking plates were evaluated.

RESULTS: At the 12 patient 's 17 hip there were no implant related complication due to implantation or fixation. Except 2 hips which had acetabular osteotomies, none of the patients had neighter