adolescents with average body mass index of 34 plus or minus 3.8 and compared with 50 age- and sex-matched controls, with a body mass index of 21.6 plus or minus 1.9. Cardiac dimensions, stroke volume, left ventricular and right ventricular systolic and diastolic functions were evaluated.

Results The obese group had a higher end-diastolic septal and posterior wall thickness and left ventricular mass index than the non-obese group. Body mass index, mid-arm and hip circumference values showed significant correlations with these echocardiographic variables. Systolic and diastolic functions of the left ventricle were normal in both groups, although stroke volume was high in the obese group. The right ventricle tissue Doppler parameters were similar in both groups. However, the S wave of the septal/lateral tricuspid valve annulus was reduced in the obese group, but not to the level reflecting systolic dysfunction. This was inversely correlated with hip, waist, and mid-arm circumference. Stepwise multiple regression analysis showed that the mid-arm and hip circumferences followed by the body mass index are significant predictors of these early cardiac abnormalities.

Conclusion Left ventricular hypertrophy is present in obese children, although both systolic and diastolic functions are normal. Tissue Doppler imaging revealed a minor, but still significant, reduction in the right ventricular systolic function.

1676 LOW DOSE OXYBUTYNIN IN CHILDHOOD NOCTURNAL ENURESIS

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Objective To evaluate response to low dose oxybutynin in children with nocturnal enuresis.

Materials and Methods Forty one out of 111 neurologically normal enuretic children who referred nephrology clinic in a 3- year period (2007–2009) received low dose oxybutynin (2.5–10 mg/day depending on the age) to define response to the drug in one and 3-month periods. No response, partially and full responses were defined as decreased in bed wetting in the rate of 0–49%, 50–89% and $\geq 90\%$ respectively.

Results In first month of treatment, full, partial and no responses were reported in 3 (7.3%), 14 (34.1%) and 24 (58.6%) patients respectively. In non-responder patients 6 (25%) and 5) 20.8 % (patients had full and partial responses in 3-month period, whereas 13 (54.2%) had no response. Side effects of the drug were reported in 5 (12.2%) patients. Children with non-mono symptomatic nocturnal enuresis presented a better response to the drug than those with mono symptomatic nocturnal enuresis (75% versus 25%). There was no significant differences between age, gender, family history of enuresis and presence of absence of daytime urinary or bowel symptoms in responder and non-responder groups ($p > 0.05$ for all).

Conclusion In the present study which is a clinical report study with no control group, there was 68.3% treatment benefit and 12 % risk (side effects of the drug) with low dose oxybutynin, so it may have a role in treating nocturnal enuresis especially patients with NMNE who experience adverse effects of the drug with standard treatment.

1677 MONOSYMPTOMATIC AND NON-MONO SYMPTOMATIC NOCTURNAL ENURESIS: A CLINICAL EVALUATION

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Background Nocturnal enuresis is divided into mono-symptomatic nocturnal enuresis (MNE) and non mono-symptomatic nocturnal

enuresis (NMNE). (This study was conducted to review clinical and ultrasonography findings in enuretic children, and compare organic and functional pathologies of lower urinary tract (LUT) in children with mono-MNE with those who have NMNE.

Methods 111 neurologically normal children with chief complaint of enuresis enrolled in the study including 60 boys and 51 girls, aged 5–17 years old, 43 (38.8) % with MNE and 68 (61.2) % with NMNE. Urine analysis, urine culture and kidney-bladder ultra sonography was done for all. Some patients underwent voiding cystoureterography (VCUG), urodynamic study (UDS), or both.

Results Patients were divided into 3 groups: MNE, NMNE -daytime incontinence and NMNE+daytime incontinence. Constipation, encopresis and urge incontinence were significantly more frequent in patients with NMNE+daytime incontinence ($p = 0.011$, 0.003, 0.001 respectively). Bladder wall thickness was the most common US findings. One patient with MNE and 9 with NMNE+ daytime incontinence had vesico-ureteral reflux (VUR) ($p = 0.016$). Posterior urethral valve was reported in one patient with NMNE. Evidences of bladder dysfunction were noted in about half of the patients who underwent UDS, with higher prevalence in cases with NMNE+daytime urinary incontinence ($p = 0.297$). Bowel symptoms and VUR were significantly more prevalent in cases with NMNE +daytime incontinence.

Conclusion We recommend doing VCUG in enuretic children who have daytime incontinence. In addition our study revealed that symptoms suggestive of over active bladder are not good indicators for bladder dysfunction.

1678 TREATMENT OF INFANTILE COLIC WITH LACTOBACILLUS REUTERI AND THE RELATIONSHIP WITH POSTPARTUM DEPRESSION: A RANDOMIZED CONTROLLED TRIAL STUDY

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Background and Aim Infantile colic (IC) is a common behavioural syndrome within the first 3 months of life. We aimed to compare the effectiveness of Lactobacillus reuteri (L.reuteri) and herbal drop combined with baby massage on IC and to evaluate the relationship with postpartum depression and anxiety.

Methods Wessel Criteria were used for the diagnosis of IC in otherwise healthy newborns. Patients were randomized into three groups: Group-1: L. Reuteri DSM17938 (BioGaia AB, Stockholm, Sweden), Group-2: Herbal drop (Babs, BerkoAB, İstanbul, Turkey), Group-3: Sterile water. All groups had baby massage. Infants crying episodes, feeding and stooling characteristics, growth, weight gain were noted weekly. Emotional structures of mother's behaviour were evaluated before and at 2nd month with Edinburgh postpartum depression scale (EPDS) and State Trait Anxiety Inventory (STAI) tests.

Results Seventy-four infants and their mothers completed the trial: 25 in the probiotic group, 24 in herbal drop, and 25 in placebo group. There was no difference between groups in demographic and clinical characteristics. The male rate was 62.2% ($n = 46$). Crying times (minutes/day) at admission were similar (Group1: 348 ± 37 , Group2: 353 ± 30 , Group3: 346 ± 28 , $p = 0.67$). A significant decrease in crying times were seen at 3.week in group1 (Group1: 35 ± 9.8 , Group2: 300 ± 32.2 , Group3: 188 ± 40 , $p = 0.001$). The weight gain at this time was in group1 better, too ($p = 0.001$). High EPDS and STAI scores decreased significantly after treatment in group1 at 2 month ($p = 0.001$). No adverse effects were reported in our groups.

Conclusion The emotional structure and anxiety level of mothers affects the behaviour of infants. L. reuteri, reduced the crying episodes, mothers anxiety and postpartum depression and can be used in treatment of infantile colic.