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We conducted a retrospective analysis of pharmacological treatment of infantile hemangioma (IH, vascular hyperplasia) with beta-blockers (enteral use of Propranolol and topical use of Timolol) in our pediatric surgery department. This method performed from 2014 to 2017 at our center. The protocol of examination and treatment developed to provide rare but serious side effects of Propranolol administration including hypoglycemia, wheezing, hypotension, and bradycardia. 78 children were treated with propranolol at the dosage 2mg/kg/day. In 17 cases we use topical 0,1% ointment of Timolol. The age of the children ranged from 10 days to 13 months, 51 female and 27 male. The treatment duration was from 5 to 13 months. Positive clinical effect it obtained at all patients. Side effects of propranolol administration were observed in 4 cases, after 5-6 month of treatment (bradycardia) which disappeared after the treatment withdrawal. In 3 cases after cancelling treatment, we determined the recurrent of hemangioma, but not to the initial size. Our experience confirms the efficacy and safety of treatment with beta-blockers in accurate compliance with protocol management.

BIOFEEDBACK TREATMENT IN CHILDREN WITH BLADDER/BOWEL NONNEUROGENIC DYSFUNCTION

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Purpose: Bladder / bowel dysfunction is a relatively frequent condition of various etiologies in children. The aim of the study was to evaluate the informative value of transperineal sonography of the pelvic floor muscles in determining the indications and evaluating the effectiveness of biofeedback therapy in children with bladder / bowel dysfunction.

Material and methods. From 2010 to 2016, 128 (69 girls and 59 boys) aged 5-14 years (mean 8.9 ± 3.1) with bladder / bowel nonneurogenic dysfunction were included. 56 (43,8%) of children complained of difficulty during urination, incomplete emptying of the bladder and 8 (6,2%) - incontinence, in 64 (50%) children had chronic constipation with incontinence. All children before and after treatment

were examined with Disfunctional Voiding Symptom Score, a Bristol stool scale, uroflowmetry with determination of residual urine and EMG of pelvic floor muscles and with transperineal ultrasonography.

Results. The results of a comprehensive study showed decrease in the flow rate on average by $37 \pm 12\%$, the volume of residual urine did not exceed 30%, and an increase in activity of the pelvic floor muscles was noted on the EMG curve. All patients were diagnosed with a paradoxical movement of the pelvic floor muscles. It was an indication for therapy with biological feedback.

Patients underwent biofeedback therapy clinical improvement was noted in all cases. Improvement in the form of uroflowmetric curve, the amount of residual urine did not exceed the permissible values in 38 patients, and in 18 the amount of residual urine decreased to 15-17%. The stress urinary incontinence in all children was absent. In 6 children the faecal incontinence disappeared. There was an increase in frequency stools and reduction of episodes of the faecal incontinence in other. In control transperineal ultrasound, complete disappearance of paradoxical movement of the pelvic floor muscles was noted in 45(34%) cases, and positive dynamics - in other patients.

Conclusions. The method of biofeedback therapy is effective in bladder/bowel nonneurogenic dysfunction. For detection and monitoring patients with this pathology can be recommended safe and simple methods - dynamic transperineal ultrasonography.