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Treatment fecal incontinence in children with bulking agent «DAM+»

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For ideal anal control its necessary existence of 3 important physiological and anatomical factors, such as:

- normal motor function of colon, especially recto sigmoid;
- normal sensation of distal part of rectum
- and normal sphincters mechanism.

In functional aspect, one of the main roles plays the internal sphincter that provides 50-85% of basal resting pressure and close of the anal canal .

The ideal bulking agent must be

- Biocompatible
- Nontoxic
- Hypoallergenic
- With antibacterial activity
- Permanent
- Easy to apply
- Low cost

Aim

- To evaluate results of using bulking agent «DAM+» (Russian Federation) in children with organic and neurogenic fecal incontinence.

«DAM+»



Materials and methods.

- The study has been performed during 5 years, since 2007 for 2013.
- In total, 35 patients, aged 2-18 with organic or neurogenic fecal incontinence after surgical correction of anorectal malformations, Hirshsprung disease or mielomeningocele were underwent 57 procedure of introduction polyacrylamid gel «DAM+».
- Patients with overflow incontinence were excluded.

Incompletely closed anus



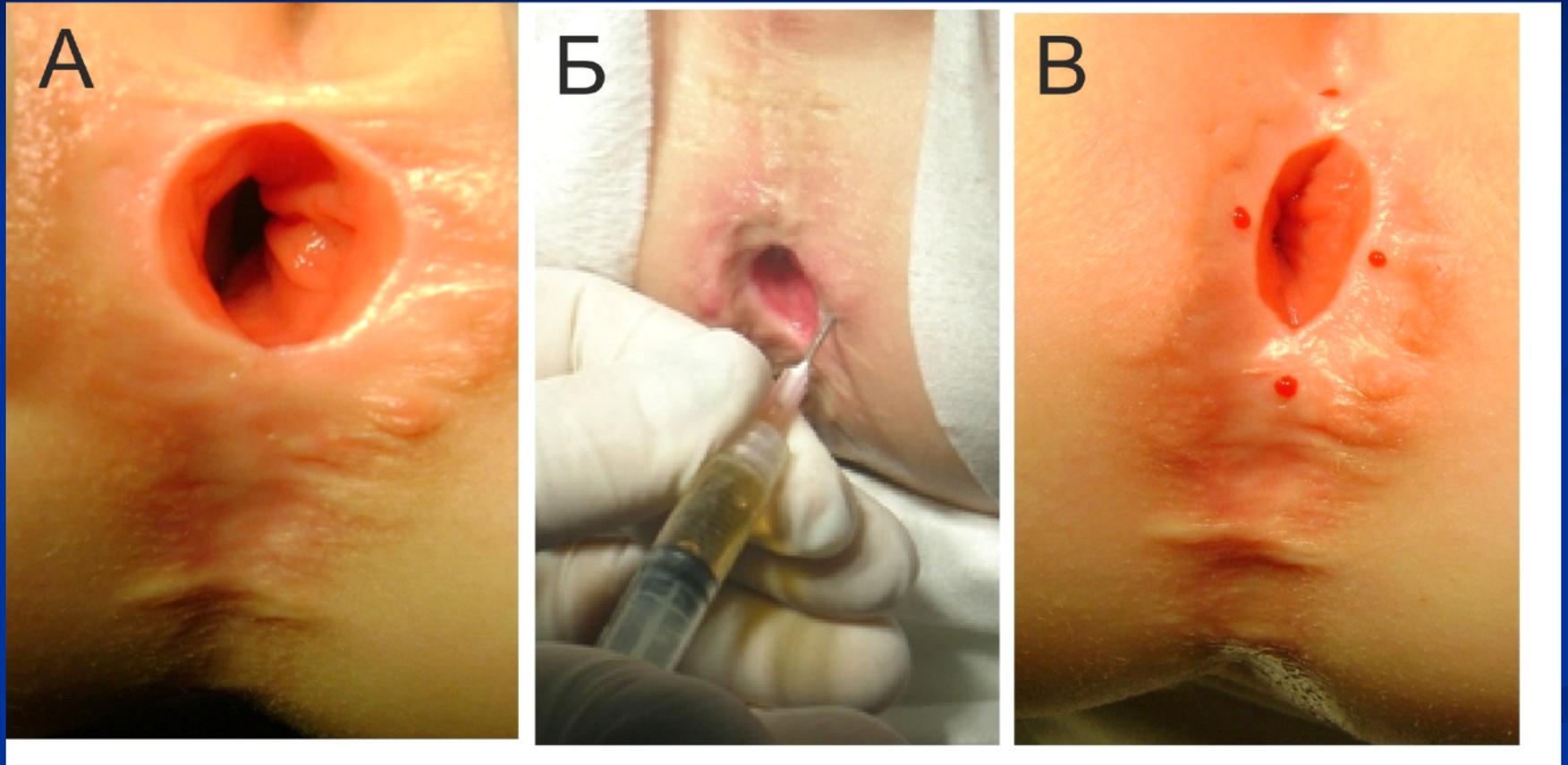
Assessment of anorectal zone and pelvic floor

- Anal manometry
- Irrigography and defecography
- Computed tomography

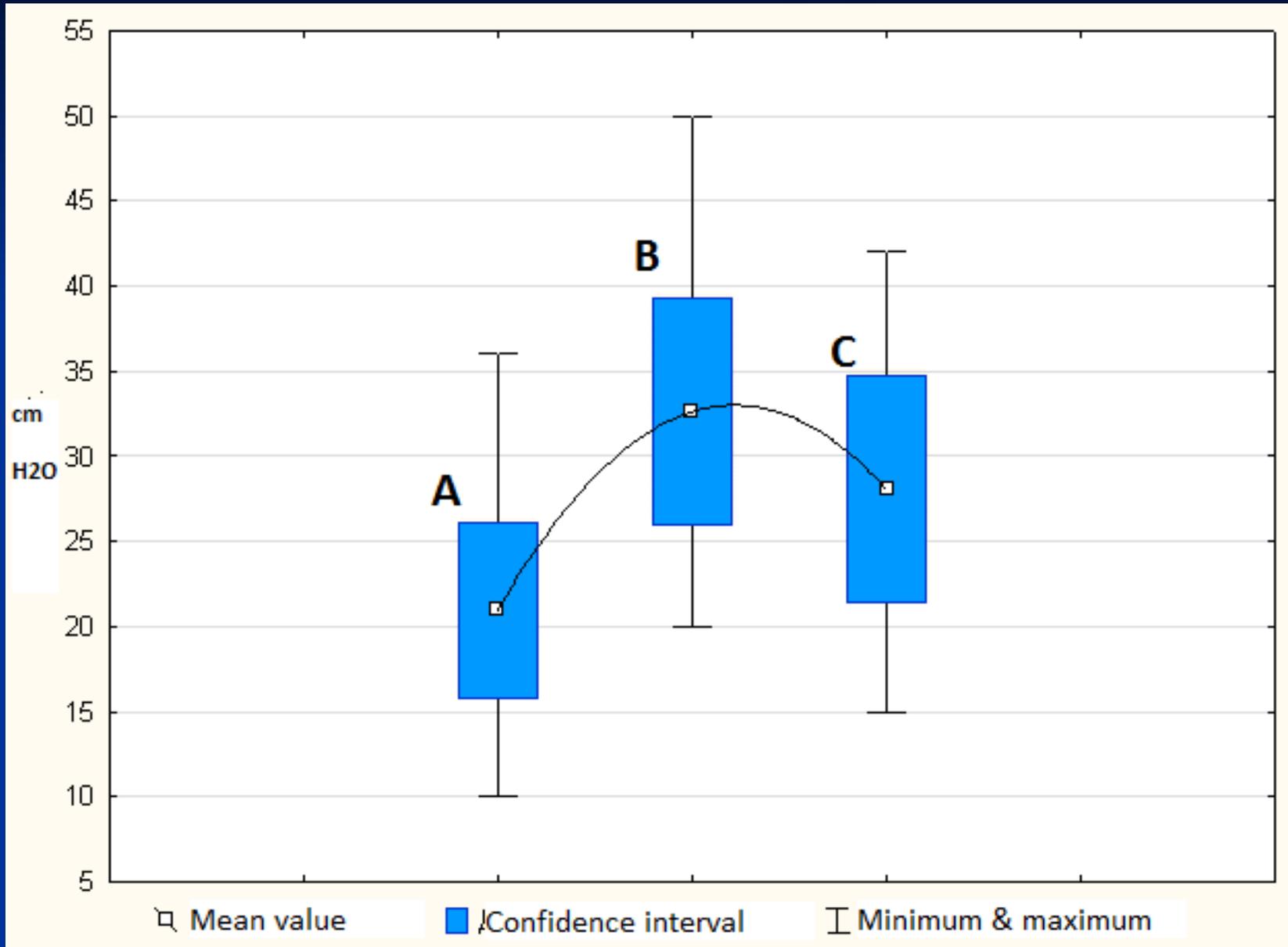
Statistical Methods

- Statistical processing of data was done on personal computer IBM PC (Intel Pentium-III), Windows XP with software Statistica for Windows (version 6.0). Students test was used for comparison of average dimensions of quantitative characters with 95% confidence interval assuming normality.

Implantation technique



Amount of resting pressure



Results

- 17 patients (51%) have marked significant improvement after first procedure.
- 11 patients (31%) received second injection in one year.
- 4 patients (31%) have undergone 3 procedures.
- 3 patients (9%) have undergone 4 procedures (one procedure a year).

Complications

- Sterile anorectal abscess was formed in 3 cases.
- Prolaps one of the boluses was developed in 1 case.

Conclusion

- Injections of «DAM+» can be used for improvement fecal continence in children with organic and neurogenic fecal incontinence.
- The clinical efficiency of procedure correlates with values of resting pressure in the anal canal before and after treatment
- At 12 month efficiency of procedure can be decreased, however resting pressure in the anal canal remain higher than before treatment.
- It is possible to reimplantate «DAM+» for reduction of number FI episodes. In some patients repeated injections were necessary

Many thanks for attention!

