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

I. Komissarov, V. Glushkova, N. Kolesnikova

Saint-Petersburg
Russia
2013
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

A

B

V
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.

- Prollaps one of the boluses was developed in 1 case.
Conclusion

- Injections of «DAM+» can be used for improvement of fecal continence in children with organic and neurogenic fecal incontinence.
- The clinical efficiency of the procedure correlates with values of resting pressure in the anal canal before and after treatment.
- At 12 month efficiency of the 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!