OPEN SURGERY REPAIR IN INGUINAL HERNIA IN CHILDREN. A CLINICAL-EVOLUTIVE ASSESSMENT OF 64 PATIENTS

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Background: Open surgery (OS) repair represents the standard treatment in inguinal hernia (IH) in children, in whole world and still very well credited even though modern surgery provides interventional alternatives.


Methods: The evaluation criteria of retrospective study were: age, environment provenance (EP), diagnosis at discharge, length of stay (LoS), surgical procedure protocol, cost of hospitalisation (CoH) and complications.

Results: 64 cases were evaluated: 45 (70.31%) younger than 7 years old, 33 (51.56%) originated from rural environment, 44 right side IH (4 strangulated, 5 scrotal-inguinal, 1 descends into labia) and 20 left side IH (2 scrotal-inguinal, 2 descend into labia), 40 (62.5%) with LoS shorter than 5 days. The average LoS was 4,171 days. The surgery protocols record OS in all cases, 2 cases also requiring hematomata evacuation. Were recorded 8 postsurgical complications (5 hematomata, 3 scrotal oedema). Average CoH per day was 326, 70 RON and average CoH per patient 1324,63 RON.

IH were more frequent in patient younger than 7 years old from urban environment (p = 0.08). Postsurgical complications were significantly more frequent in patient younger than 7 years old (p = 0.005) without being influenced by IH side. There were no significant correlation between age and type of complication. Average CoH per day was negative influenced by complications (p = 0.02) and positive by average LoS (p = 0.09).

Conclusions: The OS repair in IH in children still remains a frequently used procedure, implies fewer complications and not expensive costs.

TREATMENT OF VARICOCELE IN PAEDIATRIC PATIENTS WITH CONTRAINDICATION FOR OPEN SURGERY WITH TRANSFEMORAL RETROGRADE SCLERO-EMBOLIZATION UNDER LOCAL ANAESTHESIA

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Background: Varicocele in paediatric patients is still under discussion and the aim of this study is to present our experience with transfemoral retrograde sclero-embolization in paediatric patients and varicocele under local anaesthesia with contraindication for open surgery.

Materials and methods: Between December 2008 and December 2012 184 patients 10 to 14 years of age with varicocele were treated. Study inclusion criteria were created: grade II or III varicocele; previous inguinal surgeries and contraindications to general anaesthesia. Sclero-embolization included the following procedures: right femoral access under local sedation (carbocaine). Mean time of intervention, recurrence and persistence rates as well as early and late complications were also considered.

Results: During the study period 184 cases were treated with the radiological technique, 172 of which proved to be successful. In 10 cases a continent valve was found and it was therefore impossible to use this technique (5.4%); Two cases had rupture of the vein with consequent spillage of the contrast agent. Twelve cases (6.5%) showed recurrence. No patient reported postoperative pain.

Discussion: This technique proved to be efficient and reliable. It can be performed under local sedation and it involves fewer complications than traditional techniques.

The use of such technique allows preservation of the spermatic artery and is free from complications like testicular atrophy and hydrocele.

VARICOCELE AND ADOLESCENT: THE ROLE OF ELASTOSONOGRAPHY IN THE EVALUATION OF TESTES

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Background: Varicocele is the first cause of male sub-fertility and it is well known its correlation with testicular growth arrest. In paediatric age testicular hypotrophy is the main indication for surgical treatment. The aim of this study is to evaluate the role of elastosonography in the evaluation of testicular elasticity as predictive sign of testicular damage.

Materials and methods: 13 boys (9–13 years old) with untreated varicocele (bilateral in 3 boys and left unilateral in 10) and 12 age-matched healthy subjects underwent elastosonography. Varicocele was classified following the Dubin and Amelar classification and spermatic vein reflux was classified following a modified Hirsch classification (short, medium and continuous spermatic vein reflux). The testicular elasticity was expressed as a three-point scale (1: normal; 2: slightly to moderately stiffer than normal; 3: severely stiffer than normal). None had testicular hypotrophy. Statistical analysis was performed by means of the Student’s t-test.

Results: 2 patients had grade I varicocele, II in 9 patients had grade II varicocele and 5 patients had grade III varicocele; 3 cases had “short” spermatic vein reflux and 7 patients had continuous spermatic vein reflux. The elasticity was 1 in all 34 normal testes; in the tests with varicocele it was graded 2 in 9 cases and 3 in 7 cases. The differences in the degree of elasticity between normal testes and tests with varicocele and between continuous and medium/short spermatic vein reflux were highly significant (p < 0.001 in both cases); the difference between stage III and stages I/II varicocele was just below significance (p = 0.053).

Conclusion: Testes with varicocele are significantly stiffer than normal ones, with a positive correlation to the clinical grade and significantly to the duration of spermatic vein reflux.

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