

Results Duration of hospitalization of the I group was 6.15 ± 0.24 days, the II group - 5.29 ± 0.22 days, the III group - 4.26 ± 0.25 days ($P < 0.001$). In children of the I group 73.7% were recovered, in children of the II group - 78.2%, and in children of the III group - 85.7% of children.

Conclusions The minim invasive method of endoscopic surgery in the proper modification made possible the more rapid recovery from the inflammatory process in the patients with recurrent and chronic sinusitis.

1583 CLINICAL AND ULTRASOUND EXAMINATION AFTER UNILATERAL ORCHIOPEXY

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Aim To compare testis volume and ultrasound texture post unilateral orchiopexy with the other side.

Methods Clinical re-examination and ultrasound measurement of testicle volume and echostructure were performed in 99 children after unilateral orchiopexy, performed between 2003 and 2007.

Results Intraoperatively, 30 testis were described as hypoplastic. further 5 patients displayed pathologic funicular structures.

On Follow-up clinical exam, 45 patients displayed a small or atrophic testis on the side of surgery. In 10 patients, the testis was described as bigger on the side of surgery.

On ultrasound, 65 patients had similar pictures on the side of surgery compared to the other side. In the group < 2 years, volume was measured as $0.2 \text{ ml} \pm 0.1 \text{ ml}$ vs $0.4 \text{ ml} \pm 0.2 \text{ ml}$ contralaterally ($n=10$). In the age group 3 to 5 years volume was measured $0.4 \text{ ml} \pm 0.2 \text{ ml}$ vs $0.6 \text{ ml} \pm 0.3 \text{ ml}$ ($n=41$), in the group 6–10 years $0.4 \text{ ml} \pm 0.2 \text{ ml}$ vs $0.5 \text{ ml} \pm 0.3 \text{ ml}$ ($n=28$) and in 11 to 17 year-olds volume was $3.1 \pm 2.7 \text{ ml}$ vs $3.9 \pm 3.8 \text{ ml}$ ($n=11$).

Correlation of age at surgery and postsurgery volume difference between testes was $r=0.6$ (Pearson). In an univariate variance analysis a mild influence was found by age at surgery, inguinal hernia or re-operation.

Conclusion After orchiopexy a hypotrophic testis on the side of surgery was found in an unexpectedly high proportion. Ultrasound added valuable data (volume, texture) to the clinical follow-up examination, especially when compared to the contralateral side.

1584 APPLICABILITY OF SIGMOID COLON GRAFT FOR VAGINAL REPLACEMENT (COLOVAGINOPLASTY) AT YOUNG AGE

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Objective To evaluate the applicability, feasibility, complications, short and long term results of vaginoplasty by using sigmoid colon graft with the use of stapler for resuming colonic continuity in children with absent vagina.

Patients and Methods The records of 17 patients, 12 of them had Congenital Adrenal Hyperplasia (CAH), 3 had Androgen Insensitivity Syndrome (AIS) and 2 had vaginal atresia underwent sigmoid graft vaginal reconstruction with the aid of circular stapler during a period of 5 year from 2005 to 2010 were reviewed retrospectively.

Results A neovagina was constructed in 17 patients aged from 1 to 8 years (mean 3 years) during the study period, where sigmoid colon was used in all patients. Hospital stay ranged from 5 to 12 days (mean 7), operative time ranged from 60 to 120 min (mean 75). Complications occurred in 4 patients, introital stenosis in 2 patients, one of them necessitates revision of the introits and 2 cases had wound minor infection. The need for neovaginal dilation was indicated in only 8 out of 17 patients. There was no complications

related to bowel anastomosis, No mortality in this group, the cosmetic results were excellent in all cases, with good patient satisfaction.

Conclusion Sigmoid colovaginoplasty appears to be applicable for remedy of vaginal atresia and at any age. It is associated with a less complication rate, the long term results is satisfactory and it seems better technique than skin flaps, especially in girls who doesn't expect sexual activity shortly after surgery.

1585 UNILATERAL VERSUS BILATERAL SURGERY FOR INGUINAL HERNIA IN PREMATURE BOYS: A MULTICENTER FRENCH STUDY ON 966 CASES

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Background and Aim Bilateral surgery was formerly advocated in premature boys with unilateral inguinal hernia to avoid a metachronous contralateral hernia and the risks of recurrent anesthesia. But the recent progress in pediatric anesthesia and the demonstrated morbidity of herniotomy during the neonatal period on fertility now question this attitude. We aimed to compare the morbidity of preventive bilateral vs elective unilateral herniotomy in premature boys with unilateral hernia and to evaluate the incidence of contralateral metachronous hernia.

Methods Retrospective multicenter analysis of 966 premature boys presenting with unilateral inguinal hernia. 558 infants benefited from unilateral herniotomy and 408 from bilateral herniotomy with a median follow up of 20 months.

Results

1. The rate of contralateral metachronous hernia after unilateral surgery was 11% (10% on right vs 13% on left).
2. Morbidity on the contralateral side was higher in case of preventive bilateral surgery than in metachronous hernia (2% vs 0.2% $p=0.003$), especially for testicular hypotrophy (0.70% vs 0.18 %, $p=0.3$) and secondary cryptorchidism (1% vs 0%, $p=0.03$)
3. Comparison between the type anesthetics (general anesthesia versus central block) did not show significant differences depending on the type of care (unilateral or bilateral, planned or emergency).

Conclusion Systematic bilateral herniotomy is unnecessary in almost 90% of patients and has a higher morbidity than secondary surgery for metachronous hernia. These results, along with the risk of deferential damage and hypofertility reported in later adulthood, justify treating only the symptomatic side in premature boys.

1586 MINOR HYPOSPADIAS: THE "TIP OF THE ICEBERG" OF THE PARTIAL ANDROGEN INSENSITIVITY SYNDROME

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Background and Aims Alterations in the androgen sensitivity pathway have been identified in severely undermasculinized boys, and mutations of the androgen-receptor gene (AR) are usually

found in partial or complete androgen insensitivity syndrome. The aim of this study was to determine whether even the most minor forms of isolated hypospadias are associated with AR mutations and thus whether all types of hypospadias warrant molecular analysis of the AR.

Methods 292 Caucasian children presenting with isolated hypospadias (no micropenis, no cryptorchidism) and 345 controls were included prospectively. Mutational analysis of the AR through direct sequencing (exons 1–8) was performed.

Results Five missense mutations of the AR were identified in 9 patients with glandular or penile anterior (n=5), penile midshaft (n=2) and penile posterior (n=2) hypospadias, i.e., 3%: p.Q58L (c.1288 A>T), 4 cases of p.P392S (c.2289 C>T), 2 cases of p.A475V (c.2539 C>T), p.D551H (c.1651 G>C) and p.Q799E (c.3510 C>G). None of these mutations was present in the control group. Four mutations are novel findings since 1 has never been reported to date (p.D551H) and 3 have never been reported in patients with genital malformation but only in isolated infertility: p.Q58L, p.P392S, and p.A475V. It is notable that micropenis, a cardinal sign of AIS, was not present in any patients.

Conclusion AR mutations may play a role in the cause of isolated hypospadias, even in the most minor forms. Identification of this underlying genetic alteration is important for proper diagnosis and may significantly improve the follow-up of these patients during puberty, especially regarding future fertility.

1587 THE FEASIBILITY OF TISSUE EXPANDERS IN RECONSTRUCTION OF GIANT CONGENITAL MELANOCYTIC NEVI IN CHILDREN

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Background Children with Giant Congenital Melanocytic Nevi (GCMN) carry a great challenge to the pediatric and reconstructive surgeons to cover the widely exposed area after its excision. A variety of treatment options exists for the management of such cases. In this retrospective review of selected group of children had a GCMN of their abdominal walls were managed with implantation of tissue expanders (TE) for staged reconstruction, patients evaluated with respect to complications, general and esthetic patient and parents satisfaction.

Objective Our purpose was to study the feasibility of use tissue expanders in the management of children who had GCMN with special emphasis to the complications and children and their parents satisfaction.

Material and Methods Retrospective data collection of the 12 patient's charts, operative data of 86 surgical procedures and follow up visits were calculated and analyzed, with. Statistical analysis done using the Student t test, and P<0.05 was considered statistically significant.

Results In a period of 4 years, from 2004 to 2008, the results of using 37 different sizes tissue expanders and 86 operative procedures in a 12 child, 9 boys and 3girls aged from 2 to 12 years with different types of abdominal wall GCMN will be discussed.

Conclusion Tissue expander is a useful and feasible tool for reconstruction of the abdominal wall in cases of GCMN in children. Parents and children satisfaction and body image are generally acceptable.

1588 COMPARISON OF CIRCUMCISIONS PERFORMED WITH PLASTIC CLAMP AND CONVENTIONAL DISSECTION TECHNIQUE

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Background and Aims In the current study we serched the outcome of circumcisions performed with a new plastic clamp. The results were compared to those who underwent conventional circumcision.

Methods We analyzed the short-term complications of the procedure among the 3650 children who were consecutively circumcised by plastic Alis klamp technique. The results were compared to those of 1275 children who were circumcised by conventional technique.

Results The rate of infection (0.4%) and bleeding (0.2%) after plastic clamp were significantly lower compared to those children circumcised by conventional technique (3.2% and 4.1%; p<0.0001). Buried penis occured in similar rates among both groups. We did not encounter any penile injury in either groups. The total complication rates of plastic clamp and conventional techniques were found as 1.8% and 8.7%, respectively (p<0.0001). The mean duration of circumcision time with plastic clamp and conventional technique was 4.1 ± 1.2 min and 24 ± 3.6 min, respectively (p<0.0001).

Conclusion Plastic Alis klamp technique is suggested as the circumcision procedure of choice due to reduced complications, as well as short duration and ease of application.

Abstract 1588 Table 1 Comparison of complications

	Plastic clamp (n 3650)	%	Conventional (n 1275)	%	p
Age (years)	6.2 ± 1.5		6.9 ± 1.8		
Infection	14	0.4	41	3.2	<0.0001
Bleeding	7	0.2	52	4.1	<0.0001
Buried penis	44	1.2	18	1.4	NS
Duration (min)	4.1 ± 1.2		24 ± 3.6		<0.0001
Total complications	65	1.8	111	8.7	<0.0001

1589 ROLE OF THORACOSCOPY IN THE TREATMENT OF LOCULATED PLEURAL EMPYEMA IN PEDIATRIC PATIENTS: ABOUT 73 CASES

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Objective Evaluate the results of thoracoscopy for the treatment of located pleural empyema.

Methods Retrospective study of 73 patients with loculated pleural empyema in pediatric surgery department of Monastir during the period between 1997–2010. Located empyema was confirmed in all patients through imaging (ultrasonography or tomography of chest).

Results : The age of patients ranged between 2 months-16 years (mean age: 41.5 months) with a sex ration of 1.28. Fever was present in 98% of the cases. 25 patients had severe respiratory distress and mechanical ventilation was necessary in 4 cases. Bacteriology of the pleural liquid was positive in 12 cases. All patients had intravenous antibiotherapy during a mean period of 20 days. Sixteen patients (22%) were treated by thoracic drainage. Intrapleural fibrolysis was indicated in 5 cases (7%). One patient had an open thoracotomy for lung abscess with a loculated pleural empyema. Thoracoscopy was performed in 51 cases (70%). It was indicated after thoracic drainage failure in 14 cases. It was indicated for first-line before any prior thoracic drainage in 37 cases because of a multiloculated aspect at ultrasonography.

Conclusion Management of pleural empyema is still controversial in children and surgical indication is often delayed. Early first-line thoracoscopy yields a better clinical outcome for pediatric patients with pleural loculated empyema, with apparent decreased morbidity, earlier