

Single-step correction of hypospadias using hemostatic plate
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Пошаговая коррекция гипоспадии с использованием гемостатической пластины
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Abstract: correction of hypospadias by single-step plastic techniques using haemostatic plate decreased the incidence of post-operative complications, and number of repeated hospital admissions and general anesthesia.

Аннотация: коррекция гипоспадии методом одномоментной пластики с использованием гемостатической пластины снижает частоту послеоперационных осложнений и число повторных госпитализаций и общей анестезии.

Keywords: hypospadias, pediatric patients, single-step surgery.

Ключевые слова: гипоспадия, больные дети, одномоментная пластика.

Introduction. Study of the results of surgical correction of hypospadias using urethroplasty, shown that the therapeutic issue for this malformation is still not solved, as various failures during post-operative period approximate to 10-50 % [1, P. 70-72, 2, P. 73-74].

Main objective of our study was to improve the surgical treatment results in hypospadias pediatric patients using single-step correction [3, P. 74-75, 4, P. 76-80].

Methods. The results of examination and treatment collected from 64 pediatric patients aged from 1 to 15 years, who underwent single-step correction of hypospadias and haemostatic plate application, were taken as a basis.

Results. An analysis was performed concerning various surgical techniques for treatment and prophylaxis of post-operative complications in hypospadias pediatric patients with developing the criteria of correction techniques efficacy, allows to conclusion that good results were achieved using techniques MAGPI, Duckett, Duplay, in combination with decutanization of the penis, and single-step surgery by Snodgrass. Using the haemostatic plate during both single-step or staged surgical correction of hypospadias is a prospective technique, and requires following studies.

Implemented single-step techniques for correction of hypospadias allows to elimination of developmental malformation at earlier time (from 1 year) almost in any type of this malformation. Skin of the dorsal penile surface and preputial sack used for artificial urethra formation possesses optimum features for favorable healing. Using thin atraumatic suture material (polydioxanone or vecryl 6/0-7/0) allows to better healing of the artificial urethra.

Transurethral urinary derivation is effective for post-operative urine derivation. It is necessary to use compression dressing in early post-operative period for 4-7 days, which prevents tissue edema and allows to optimum healing of the formed urethra. Bladder drainage using urethral catheter is reasonable after urethroplasty for the period from 7 to 10 days.

Post-operative use of sulphanilamide drugs is sufficient and effective preventive means for post-operative inflammation.

Conclusion. Correction of hypospadias by single-step plastic techniques using haemostatic plate decreased the incidence of post-operative complications from 40.86 % to 20 %, and number of repeated hospital admissions and general anesthesia 3-fold.

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