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UROLOGICAL PRESENTATIONS TO A PEDIATRIC SURGERY OUTPATIENT CLINIC: CHARACTERISTICS, DIAGNOSES, AND CLINICAL DECISIONS

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Abstract

Aim: To evaluate the demographic characteristics, diagnostic patterns, presenting complaints, and clinical decision-making processes of children presenting with urological complaints to a pediatric surgery outpatient clinic. This retrospective study included 156 children who presented with urological complaints. Patients with non-urological ICD-10 codes or whose families declined consent were excluded. Data on age, sex, presenting complaints, ICD-10 diagnoses, laboratory investigations, follow-up intervals, and final clinical decisions were analyzed. Statistical analyses included the Mann–Whitney U test, Kruskal–Wallis test, chi-square and Fisher's exact tests, and multinomial logistic regression. Analyses were performed using *jamovi* 2.7.32.0 statistics package. The study was conducted in accordance with the Declaration of Helsinki, and informed consent was obtained from the parents or legal guardians. Results of the 156 patients, 115 (73.7%) were male and 41 (26.3%) were female. Median admission age was significantly lower in males (3 years, IQR 2–5) than in females (8 years, IQR 5–12) ($p < 0.001$). The most frequent diagnoses were N39.0 (36.5%), N39.9 (31.4%), and R39.8 (14.7%). Presenting complaints differed significantly by sex ($p < 0.001$), mainly due to penile and circumcision-related problems in boys. Dysuria occurred at similar rates in both sexes. Clinical decisions showed no significant association with the initial ICD-10 diagnosis ($p = 0.756$). Multinomial logistic regression indicated that laboratory investigations, rather than age or sex, were more strongly associated with subsequent management decisions. Boys predominate among pediatric urological presentations and present at a younger age than girls. Initial outpatient diagnoses are largely symptom-based and non-specific. Clinical decisions appear to be guided more by investigation results and individual clinical course than by the preliminary diagnostic code. Age- and sex-sensitive evaluation strategies may improve the efficiency of outpatient pediatric urological care.

Keywords: Pediatrics; Urology; Outpatients; Urinary Tract Infections; Clinical Decision-Making

INTRODUCTION

Pediatric urology encompasses disorders of the urinary tract and genital organs from infancy through adolescence. These conditions range from urinary tract infections to congenital genital anomalies

and may influence both physical health and psychosocial development. Common problems encountered in this age group include urinary tract infections, hypospadias, phimosis, and enuresis. Early recognition and appropriate management



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of urinary tract infection are essential to prevent complications such as pyelonephritis (1). Urinary tract infections may also occur frequently in children without underlying bladder dysfunction (1-3).

The literature consistently indicates that the pattern of urological complaints in children varies according to age and sex. Congenital anomalies predominate in infancy and early childhood, whereas infectious and functional disorders become more prominent during school age. The epidemiological profile of adolescents may further differ from that of younger children (4). Functional conditions such as nocturnal enuresis affect 15–20% of children around the age of five and decline progressively with advancing age.

Understanding the distribution of these problems by age and sex is important because it directly influences diagnostic pathways and treatment strategies. Epidemiological evaluations also contribute to assessing disease burden and comparing the cost-effectiveness of different management approaches (5). In addition, a systematic initial evaluation by the physician facilitates appropriate multidisciplinary involvement when required (5). The epidemiology of pediatric urological disorders is further shaped by geographical and socioeconomic factors.

In the present study, we analyzed data from children presenting to a pediatric surgery outpatient clinic with urological complaints. We aimed to characterize the demographic

profile, identify the ICD-10 diagnoses assigned at the first visit, and examine the relationships between age, sex, presenting complaints, and subsequent clinical decisions. We examined age differences by sex and the patterns of initial evaluation that influence diagnostic and therapeutic pathways.

METHODS

This retrospective study was conducted on pediatric patients who presented to the pediatric surgery outpatient clinic with urological complaints. Medical records of all children evaluated during the study period were reviewed. Patients were included if their primary ICD-10 diagnosis was classified as urological. Exclusion criteria were;

- (1) an ICD-10 code that was not related to the urinary or genital system and
- (2) refusal of the family to provide informed consent for the use of anonymized clinical data.

The study was conducted in accordance with the principles of the Declaration of Helsinki. Written informed consent was obtained from the parents or legal guardians of all participating children prior to data extraction and analysis. Ethically, patient identities were anonymized. Ethical approval numbered GOKAEK-2414_2024.12.04_256 was obtained from the University Hospital Non-Interventional Clinical Research Ethics Committee.

Demographic data (age at admission and sex), presenting complaints, ICD-10 diagnoses (primary and subsequent), laboratory and imaging investigations ordered, outpatient follow-up intervals, and final clinical decisions (observation/normal, follow-up, prescription, circumcision, antireflux treatment, or surgical recommendation) were extracted from the electronic medical records. Continuous variables were summarized as median and

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interquartile range (IQR). Categorical variables were presented as frequencies and percentages.

Comparisons of continuous variables between two independent groups were performed with the Mann–Whitney U test. Comparisons across more than two groups were performed with the Kruskal–Wallis test. Associations between categorical variables were assessed with the chi-square test or Fisher’s exact test (with Monte Carlo simulation when appropriate). Multinomial logistic regression was used to evaluate the independent effects of age, sex, and laboratory testing on final clinical decisions, with “normal/observation” serving as the reference category. Model fit was assessed by deviance, Akaike information criterion (AIC), and McFadden’s pseudo- R^2 . A two-sided p -value < 0.05 was considered statistically significant.

All statistical analyses were performed using the jamovi 2.7.32.0 package.

RESULTS

A total of 156 children who presented to the pediatric surgery outpatient clinic with urological complaints were included in the analysis. Of these, 115 (73.7%) were male and 41 (26.3%) were female. The median admission age was 3 years (interquartile range [IQR]: 2–5) among males and 8 years (IQR: 5–12) among females (Table 1). Female patients were significantly older than male patients (Mann–Whitney $U = 1064$, $p < 0.001$).

The most frequent ICD-10 diagnoses were N39.0 (urinary tract infection) and N39.9 (disorder of urinary system, unspecified). N39.0 accounted for 40 (35%) of male and 17 (41%) of female diagnoses, while N39.9 accounted for 29 (25%) of male and 20 (49%) of female diagnoses. Other diagnoses were distributed at low frequencies across both sexes (Table 1).

Table 1. Demographic characteristics and ICD-10 diagnosis distribution by sex

Characteristic	Male (N = 115)	Female (N = 41)
Admission age, median (IQR)	3 (2, 5)	8 (5, 12)
Diagnosis, n (%)		
D41.9	1 (0.9)	0 (0)
F98.0	1 (0.9)	2 (4.9)
J22	1 (0.9)	0 (0)
N13.3	1 (0.9)	0 (0)
N35	2 (1.7)	0 (0)
N39	3 (2.6)	0 (0)
N39.0	40 (35)	17 (41)
N39.8	1 (0.9)	0 (0)
N39.9	29 (25)	20 (49)
N47	1 (0.9)	0 (0)
N48.1	1 (0.9)	0 (0)
Q53	1 (0.9)	0 (0)
Q54	1 (0.9)	0 (0)
Q64.9	1 (0.9)	0 (0)
R31	1 (0.9)	0 (0)
R32	0 (0)	1 (2.4)
R39	5 (4.3)	0 (0)
R39.8	22 (19)	1 (2.4)

Z00.1	1 (0.9)	0 (0)
F93.8	2 (1.7)	0 (0)

Data are presented as median (Q1, Q3) or n (%).

The official designations and clinical explanations of the principal ICD-10 codes encountered in the cohort are summarized in Table 2. Most presentations clustered

under symptomatic codes (particularly R39.8 and related R-group codes) rather than structural congenital anomalies (Q-group codes)

Table 2. ICD-10 codes identified in the study and corresponding clinical explanations

ICD-10 Code	Official designation	Clinical explanation
Q64.9	Congenital malformation of urinary system, unspecified	Congenital urinary-tract anomalies that cannot be further classified
R31	Hematuria, unspecified	Macroscopic or microscopic blood in the urine
R32	Unspecified urinary incontinence	Involuntary urine leakage
R33	Retention of urine	Incomplete bladder emptying or inability to void
R39	Other symptoms and signs involving the urinary system	Other specific lower-urinary-tract symptoms
R39.8	Other and unspecified symptoms and signs involving the urinary system	Urogenital findings not classifiable under the preceding categories
Z00.1	Routine child health examination	Routine pediatric health supervision performed in the outpatient setting
F93.8	Other childhood emotional disorders	Psychophysiological or emotional states that may accompany urological complaints (e.g., enuresis)

Statistical evaluation of the relationships among sex, age, and diagnosis is presented in Table 3. No significant association was found between sex and diagnostic category ($\chi^2 = 25.0$, $df = 19$, $p = 0.162$; Fisher's exact test $p = 0.085$).

Admission age differed markedly by sex (Mann–Whitney $U = 1064$, $p < 0.001$) but showed only a borderline, non-significant trend across diagnostic groups (Kruskal–Wallis $\chi^2 = 28.3$, $df = 19$, $p = 0.078$).

Table 3. Statistical comparisons of age and sex with clinical diagnoses

Variable	Test	Statistic	df	p-value	Clinical interpretation
Sex × diagnosis distribution	Chi-square (χ^2)	25.0	19	0.162	No statistically significant association between diagnostic groups and sex ($p > 0.05$)
	Fisher's exact test	—	—	0.085	Distribution remains homogeneous after accounting for sparse cells ($p > 0.05$)
Admission age	Mann–Whitney U	1064	—	<0.001	Admission age differs highly significantly by sex ($p < 0.001$)
	Kruskal–Wallis (χ^2)	28.3	19	0.078	Age distribution across diagnostic groups shows a borderline trend but is not significant ($p > 0.05$)

Total sample size $N = 156$.

Median age was significantly higher in girls than in boys (Mann–Whitney $U = 1064$, $p < 0.001$). Diagnostic profiles did not differ significantly by sex (Fisher's exact $p = 0.085$). Age distribution across ICD-10 categories was likewise non-significant (Kruskal–Wallis $p = 0.078$).

Presenting complaints stratified by sex are shown in Table 4. Overall complaint distribution differed highly significantly

between sexes (Fisher's exact test, $p < 0.001$). External genitalia-related complaints accounted for 47 (40.9%) of male presentations and were absent among females. Dysuria occurred at nearly identical frequencies in both sexes (24.3% of males, 24.4% of females). Systemic or general complaints were substantially more common among girls (41.5%).

4. Distribution of presenting complaints by sex

Presenting complaint	Male n (%)	Female n (%)	Total n (%)	Statistical analysis
<i>Dysuria</i>	28 (24.3)	10 (24.4)	38 (24.4)	
<i>Enuresis and related disorders</i>	7 (6.1)	3 (7.3)	10 (6.4)	
<i>Infection and urine changes</i>	20 (17.4)	8 (19.5)	28 (17.9)	
<i>Penile and circumcision-related complaints</i>	47 (40.9)	0 (0.0)	47 (30.1)	Fisher's exact test
<i>Stenoses</i>	8 (7.0)	2 (4.9)	10 (6.4)	$p < 0.001^*$
<i>Congenital and structural anomalies</i>	3 (2.6)	1 (2.4)	4 (2.6)	(Monte Carlo simulation)
<i>Labial fusion (female-specific)</i>	0 (0.0)	1 (2.4)	1 (0.6)	
<i>Other systemic/general complaints</i>	2 (1.7)	17 (41.5)	19 (12.2)	
Total	115 (100.0)	41 (100.0)	156 (100.0)	

$p < 0.05$ indicates a highly statistically significant difference.

The temporal relationship between outpatient follow-up intervals and the assignment of second (Diagnosis 2) and third (Diagnosis 3) diagnoses is summarized in Table 5. Both Diagnosis 2 ($\chi^2 = 391$, $df = 256$, $p < 0.001$) and Diagnosis 3 ($\chi^2 = 356$, $df = 84$, $p < 0.001$) were strongly associated with follow-up

timing. Most patients required neither a second (83.9%, $n = 131$) nor a third (87.1%, $n = 136$) diagnostic code. Same-day encounters predominantly retained the original symptomatic codes, whereas longer follow-up intervals occasionally incorporated functional or chronic codes (e.g., constipation-related K59).

Table 5. Matrix of second and third diagnoses according to outpatient follow-up interval

Follow-up interval	Diagnosis 2 (n = 156)	Diagnosis 3 (n = 156)	Clinical tendency
<i>Same-day (SAME)</i>	No additional diagnosis: 49 Acute symptomatic codes: 18	No additional diagnosis: 63 Acute clinical codes: 4	Same-day visits largely remained limited to the index symptom
<i>Early (1–2 months)</i>	No additional diagnosis: 11 Follow-up codes: 2	No additional diagnosis: 13	New organic pathology rarely added at early review

		Routine surveillance: 0	
<i>Intermediate–long</i> (3 months–5 years)	No additional diagnosis: 9 Chronic/functional codes: 3	No additional diagnosis: 10 Chronic surveillance codes: 2	Longer intervals occasionally introduced functional bowel or structural codes
<i>No follow-up / did not return (NONE)</i>	No additional diagnosis: 55 Isolated organic codes: 4	No additional diagnosis: 134 Additional codes: 2	Patients lost to follow-up rarely received tertiary diagnoses
<i>Statistical analysis</i>	Pearson $\chi^2 = 391$, df = 256, $p < 0.001^*$	Pearson $\chi^2 = 356$, df = 84, $p < 0.001^*$	Both secondary diagnostic processes are highly significantly related to timing of clinic attendance

$p < 0.05$ denotes high statistical significance. Sparse zero cells were collapsed for tabular clarity.

A multinomial logistic regression model was constructed to examine factors associated with final clinical decisions (operation recommendation, reflux treatment, circumcision, follow-up, or prescription), using “normal/observation” as the reference category. Model-fit indices and omnibus tests are shown in Table 6. The model

demonstrated moderate explanatory power (McFadden pseudo- $R^2 = 0.176$, deviance = 467.00). Omnibus likelihood-ratio tests indicated that sex ($p = 0.344$), admission age ($p = 0.137$), and laboratory-test category ($p = 0.808$) did not exert statistically significant independent main effects on final decisions.

Table 6. Multinomial logistic regression model fit and omnibus effects

<i>Model-fit index</i>	<i>Value</i>	<i>Independent variable (omnibus tests)</i>	χ^2	<i>df</i>	<i>p-value</i>
<i>Deviance</i>	467.00	Sex	16.60	15	0.344
<i>AIC</i>	677.00	Laboratory (simplified categories)	50.40	60	0.808
<i>Pseudo-R^2 (McFadden)</i>	0.176	Admission age	21.00	15	0.137

AIC: Akaike information criterion

Parameter estimates for selected contrasts are presented in Table 7. Relative to children managed expectantly, those who underwent ultrasonography alone had significantly higher odds of receiving an operation recommendation (OR = 1.28, $p < 0.001$). Children who received combined laboratory testing (ultrasonography plus

urine analysis) were substantially less likely to be assigned to simple follow-up only (OR = 0.09, 95% CI 0.01–0.55, $p = 0.009$). Neither age nor sex independently predicted operation, circumcision, follow-up, or prescription decisions after adjustment ($p > 0.05$ for all relevant contrasts).

Table 7. Selected parameter estimates from the multinomial logistic regression model (reference category: normal/observation)

<i>Clinical decision</i>	<i>Independent variable</i>	<i>Odds ratio</i>	<i>95% CI</i>	<i>p-value</i>
<i>Operation recommendation</i>	Admission age	0.85	0.46–1.54	0.581
	Sex (female vs male)	<0.01	Sparse cells	<0.001
	Laboratory (USG vs none)	1.28	1.28–1.28	<0.001

<i>Reflux treatment</i>	Admission age	1.43	0.62–3.28	0.405
	Laboratory (urine vs none)	<0.01	<0.01– <0.01	<0.001
<i>Circumcision</i>	Admission age	0.85	0.53–1.35	0.494
	Laboratory (combined vs none)	0.93	0.06–15.46	0.960
<i>Follow-up</i>	Admission age	0.94	0.79–1.12	0.479
	Sex (female vs male)	1.01	0.17–5.84	0.994
	Laboratory (combined vs none)	0.09	0.01–0.55	0.009
<i>Prescription</i>	Admission age	1.02	0.86–1.22	0.782
	Sex (female vs male)	1.77	0.31–10.20	0.524
	Laboratory (combined vs none)	0.33	0.06–2.00	0.231

Finally, the relationship between principal diagnostic categories and ultimate clinical disposition is displayed in Table 8. The three most frequent diagnoses—N39.0 (36.5%), N39.9 (31.4%), and R39.8 (14.7%)—showed comparable rates of active treatment recommendation (53–

65%). No statistically significant association was observed between diagnostic group and clinical decision (Fisher's exact $p = 0.756$). Decisions appeared to be driven more by individual clinical trajectory than by the specific ICD-10 label assigned at presentation.

Table 8. Clinical decisions according to principal diagnostic category

Diagnosis (ICD-10)	Total patients <i>n</i> (%)	Follow-up <i>n</i> (%)	Normal/control <i>n</i> (%)	Active treatment/recommendation* <i>n</i> (%)	Fisher's exact <i>p</i>
<i>N39.0 (urinary-tract infection)</i>	57 (36.5)	16 (28.1)	4 (7.0)	37 (64.9)	
<i>N39.9 (disorder of urinary system)</i>	49 (31.4)	18 (36.7)	5 (10.2)	26 (53.1)	
<i>R39.8 (other voiding symptoms)</i>	23 (14.7)	7 (30.4)	2 (8.7)	14 (60.9)	0.756
<i>N39 (other urinary disorders)</i>	3 (1.9)	2 (66.7)	1 (33.3)	0 (0.0)	
<i>Other urological diagnoses**</i>	24 (15.4)	9 (37.5)	1 (4.2)	14 (58.3)	
Total	156 (100)	52 (33.3)	13 (8.3)	91 (58.3)	

*Active treatment/recommendation includes operation recommendation, reflux treatment, circumcision, medical therapy, pediatric psychiatry referral, and other specific recommendations. **Rare codes (patient count < 3) were aggregated.

Overall, the clinical decision-making process in this outpatient urological cohort

was only weakly related to demographic variables or to the initial ICD-10 label and

was more closely linked to the results of targeted laboratory investigations and to the longitudinal course of symptoms.

DISCUSSION

Our findings highlight important demographic and clinical patterns in children presenting with urological complaints to a pediatric surgery outpatient clinic. Males constituted the clear majority (73.7%), and they presented at a significantly younger age than females (median 3 years versus 8 years, $p < 0.001$). This age difference is consistent with the literature, in which congenital anomalies such as hypospadias and phimosis are typically diagnosed in infancy and early childhood among boys, whereas urinary tract infections become more prominent in girls during school age (3). Similar trends have been reported in studies from our country, where urinary tract infections are more common in boys during infancy but increase substantially in girls at school age. The most frequently assigned ICD-10 codes were non-specific: N39.0 (urinary tract infection), N39.9 (disorder of the urinary system, unspecified), and R39.8 (other symptoms and signs involving the urinary system). Together, these three codes accounted for most primary diagnoses. This pattern indicates that the initial outpatient evaluation is largely symptom-oriented rather than based on a definitive structural diagnosis. Minor urinary symptoms are known to occur frequently even in otherwise healthy individuals (6). As noted by Kyrklund and colleagues, such symptoms are relatively uncommon in carefully selected healthy children aged 4–7 and 8–12 years, which may help distinguish pathological from functional complaints (6).

A highly significant difference was observed in the distribution of presenting complaints according to sex ($p < 0.001$). Penile and

circumcision-related problems accounted for approximately 41% of male presentations. In contrast, dysuria occurred at nearly identical rates in both sexes (approximately 24%). These findings align with previous observations that anatomical factors (such as a shorter urethra) increase the risk of infection in girls, while local genital problems predominate in boys (3). Interestingly, the initial ICD-10 diagnosis showed no statistically significant association with the final clinical decision (follow-up, observation, or active treatment recommendation; $p = 0.756$). Multinomial logistic regression further demonstrated that age and sex did not independently predict most clinical decisions once laboratory investigations were considered. Ordering ultrasonography or combined laboratory tests was more strongly associated with the subsequent management pathway. This suggests that, in the outpatient setting, the clinician's decision is driven more by the results of targeted investigations and the individual clinical course than by the preliminary diagnostic code assigned at the first visit.

The literature emphasizes that recurrent urinary tract infections may lead to bladder dysfunction and that symptoms such as urgency, daytime incontinence, and enuresis require careful follow-up because they may persist into adulthood (2,3,8). Upper and lower urinary tract infections have been reported to be more common in girls across age groups, while incontinence and enuresis tend to be more frequent in younger children (2). Our data are consistent with these patterns, although the predominance of non-specific coding limited more granular analysis of functional disorders.

Taken together, the results support the multidisciplinary nature of pediatric urology and underline the value of a structured

initial evaluation. Early genital examination and screening for congenital anomalies remain particularly relevant in young boys, whereas infection prevention strategies and assessment for bladder dysfunction are more pertinent in school-age girls. In recent years, technological advances have further increased the importance of timely diagnosis, as minimally invasive and endourological techniques now allow earlier intervention and may help prevent long-term complications (9).

Limitations

The main limitation of the study is the relatively modest sample size ($n = 156$), which restricts the generalizability of the findings. Because the data were obtained from a single outpatient clinic, regional bias cannot be excluded. The retrospective design limits causal inference. In addition, the text-based nature of presenting complaints may have introduced categorization inaccuracies. Future prospective, multicenter studies with larger cohorts would help validate these patterns and allow more detailed analysis of functional and structural subgroups.

CONCLUSION

This retrospective study demonstrated that boys constitute most children presenting with urological complaints to a pediatric surgery outpatient clinic and that they present at a significantly younger age than girls. The most frequently assigned diagnoses were non-specific codes (N39.0, N39.9, and R39.8), reflecting a predominantly symptom-based approach at the first visit. Presenting complaints differed markedly by sex, mainly because of penile and circumcision-related problems in boys, whereas clinical decisions were more closely related to laboratory investigations and individual clinical course than to the initial diagnostic label.

These findings reinforce the importance of age- and sex-sensitive evaluation pathways. Larger multicenter studies are needed to confirm the observed patterns and to refine outpatient referral and management strategies in pediatric urology.

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PEDIATRİK CƏRRAHIYYƏ AMBULATORİYASINA UROLOJİ MÜRACİƏTLƏR: XÜSUSİYYƏTLƏR, DIAQNOZLAR VƏ KLİNİK QƏRARVERMƏ

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Xülasə

İşin məqsədi: pediatrik cərrahiyyə ambulatoriyasına uroloji şikayətlərlə müraciət edən uşaqların demoqrafik xüsusiyyətlərini, diaqnostik yanaşmalarını, əsas müraciət şikayətlərini və klinik qərarvermə proseslərini qiymətləndirmək. Bu retrospektiv tədqiqata uroloji şikayətlərlə müraciət edən 156 uşaq daxil edilmişdir. Qeyri-uroloji ICD-10 kodları olan və ya ailələri tədqiqatda iştirak etməyə razılıq verməyən pasiyentlər tədqiqatdan xaric edilmişdir. Yaş, cins, müraciət şikayətləri, ICD-10 diaqnozları, laborator müayinələrin nəticələri, müşahidə intervalları və yekun klinik qərarlar barədə məlumatlar təhlil edilmişdir. Statistik təhlillərə Mann–Whitney U testi, Kruskal–Wallis testi, χ^2 testi, Fisher-in dəqiq testi və multinomial logistik regressiya daxil edilmişdir. Təhlillər *jamovi* 2.7.32.0 statistik proqram paketindən istifadə edilməklə aparılmışdır. Tədqiqat Helsinki Bəyannaməsinin prinsiplərinə uyğun şəkildə həyata keçirilmiş və valideynlərdən və ya qanuni nümayəndələrdən məlumatlandırılmış razılıq alınmışdır. 156 pasiyentin 115-i (73,7%) oğlan, 41-i (26,3%) qız olmuşdur. Müraciət zamanı median yaş oğlanlarda (3 yaş, IQR 2–5) qızlarla müqayisədə (8 yaş, IQR 5–12) əhəmiyyətli dərəcədə aşağı olmuşdur ($p < 0,001$). Ən çox rast gəlinən diaqnozlar N39.0 (36,5%), N39.9 (31,4%) və R39.8 (14,7%) olmuşdur. Müraciət şikayətləri cinsə görə əhəmiyyətli dərəcədə fərqlənmişdir ($p < 0,001$); bu fərq əsasən oğlanlarda penis və sünnətlə əlaqəli problemlərlə bağlı olmuşdur. Dizuriya hər iki cinsdə oxşar tezlikdə müşahidə edilmişdir. Klinik qərarlar ilə ilkin ICD-10 diaqnozu arasında statistik cəhətdən əhəmiyyətli əlaqə aşkar edilməmişdir ($p = 0,756$). Multinomial logistik regressiyanın nəticələri göstərmişdir ki, sonrakı müalicə və idarəetmə qərarları ilə yaş və cinsdən daha çox laborator müayinələrin nəticələri əlaqəlidir. Pediatrik uroloji müraciətlər arasında oğlanlar üstünlük təşkil edir və onlar qızlarla müqayisədə daha erkən yaşda müraciət edirlər. İlkin ambulator diaqnozlar əsasən simptomlara əsaslanır və spesifik xarakter daşımır. Klinik qərarların ilkin diaqnostik koddan daha çox müayinələrin nəticələri və pasiyentin fərdi klinik gedişinə əsasən qəbul edildiyi görünür. Yaş və cins xüsusiyyətlərini nəzərə alan qiymətləndirmə strategiyalarının tətbiqi ambulator pediatrik uroloji yardımın səmərəliliyini artırır.

Açar sözlər: *Pediatriya; Urologiya; Ambulator pasiyentlər; Sidik yollarının infeksiyaları; Klinik qərarvermə*

УРОЛОГИЧЕСКИЕ ОБРАЩЕНИЯ В АМБУЛАТОРНУЮ КЛИНИКУ ДЕТСКОЙ ХИРУРГИИ: ХАРАКТЕРИСТИКИ, ДИАГНОЗЫ И КЛИНИЧЕСКИЕ РЕШЕНИЯ

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Резюме

Цель исследования - оценить демографические характеристики, диагностические подходы, основные жалобы при обращении и процессы принятия клинических решений у детей, обращающихся в амбулаторное отделение детской хирургии с урологическими жалобами. В данное ретроспективное исследование были включены 156 детей, обратившихся с урологическими жалобами. Пациенты с неурологическими кодами ICD-10, а также пациенты, родители или законные представители, которых отказались от участия, были исключены из исследования. Были проанализированы данные о возрасте, поле, жалобах при обращении, диагнозах по ICD-10, результатах лабораторных исследований, интервалах наблюдения и окончательных клинических решениях. Статистический анализ включал U-критерий Манна-Уитни, критерий Краскела-Уоллиса, критерий χ^2 , точный критерий Фишера и мультиномиальную логистическую регрессию. Анализ проводился с использованием статистического программного пакета *jamovi версии 2.7.32.0*. Исследование было проведено в соответствии с принципами Хельсинкской декларации; от родителей или законных представителей было получено информированное согласие.

Из 156 пациентов 115 (73,7%) были мальчиками и 41 (26,3%) — девочками. Медианный возраст при обращении был значительно ниже у мальчиков (3 года, межквартильный диапазон [IQR] 2–5 лет), чем у девочек (8 лет, IQR 5–12 лет) ($p < 0,001$). Наиболее часто встречающимися диагнозами были N39.0 (36,5%), N39.9 (31,4%) и R39.8 (14,7%). Жалобы при обращении статистически значимо различались в зависимости от пола ($p < 0,001$), главным образом вследствие проблем, связанных с половым членом и обрезанием у мальчиков. Дизурия встречалась с одинаковой частотой у представителей обоих полов. Статистически значимой связи между клиническими решениями и первоначальным диагнозом по ICD-10 выявлено не было ($p = 0,756$). Мультиномиальная логистическая регрессия показала, что результаты лабораторных исследований были более тесно связаны с последующими решениями по ведению пациентов, чем возраст или пол.

Среди обращений детей с урологическими жалобами преобладают мальчики, причём они обращаются за медицинской помощью в более раннем возрасте, чем девочки. Первоначальные амбулаторные диагнозы в значительной степени основываются на симптомах и имеют неспецифический характер. По-видимому, клинические решения в большей степени определяются результатами диагностических исследований и индивидуальным течением заболевания, чем предварительным диагностическим кодом. Использование стратегий обследования с учётом возраста и пола может повысить эффективность амбулаторной урологической помощи детям.

Ключевые слова: *педиатрия; урология; амбулаторные пациенты; инфекции мочевыводящих путей; принятие клинических решений.*