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Families' preference after out patient pediatric surgery: In or out patient?

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Summary

Six hundred eight questionnaires were sent to the families whose children were operated for inguinal hernia in one of the biggest cities of Turkey. Families' preference of outpatient pediatric surgical procedures after five years and factors influencing their preference is investigated. Of the 229 families replied, 65 % of them preferred outpatient, 25 % preferred inpatient treatment. The age of the child, the side of the operative repair, the year of the operation, the place of the families' residence, the hospitalization of their children or another family member for any other reason, and the occurrence of a second operation for contralateral side or recurrence did not influence the preference.

However, postoperative complaints and the type of hospital at which the child was operated had effects on parents' preference. The most common postoperative complaint was the fear regarding the home care of the patient. We suggest that outpatient surgical centers and separate teams will solve this problem. Additionally perioperative informative discussions must be adequate to eliminate families' fear due to outpatient pediatric surgery.

Key words: *Outpatient pediatric surgery, inguinal hernia*

Introduction

Bursa, with a population over one and a half million, is the fifth biggest city of Turkey. Pediatric surgical services were established in three big hospitals of the city at the beginning of eighties. At the end of 1983, one of the authors (T.A.) started to work as the first pediatric surgeon in one of these hospitals and initiated the outpatient pediatric surgical procedures (OPSP).

As the other physicians of the State Hospital, he worked part-time accepting his patients both in the State Hospital and in his private office. He moved to another city in 1988. This five years' period in an industrialized city provided a unique opportunity for investigating the families' approach to outpatient surgery from the beginning. Studies concerning families' opinions on OPSP are being increased parallel to the increasing interest in OPSP. These studies are based on the observations of the immediate postoperative period [2,4]. The aim of this study was to investigate the families' remembrance of the procedure at least five years after the operation and their preference in the same situation today. Additionally, factors that can influence their choice was investigated.

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Material and Methods

To standardize the study group, patients who were examined and operative treatment was recommended for inguinal hernia by a single pediatric surgeon in his private office were selected. All of the patients were operated by himself in the State Hospital or at a private hospital. Six hundred and eight records were rewieved. Age of the patient, side of the operative repair, postoperative complications, hospital at which the patient was operated and the place of families' residence were recorded. Questionnaires were sent to the families, the year of the operation, the occurence of a second operation for contralateral side or recurrent hernia, hospitalization for operative treatment of another family member and hospitalization of their children for any other reason were asked as multiple choice questions. Postoperative complaints were to be answered in the parents' own words. Finally they were asked what would be their choice today (inpatient or outpatient), if their grandchildren were to be operated for inguinal hernia. Additionally, they were asked to explain the reason of their choice. Statistical differences were determined by the X2 test.

Results

Of the 608 questionnaires sent, 233 families replied. Four questionnaires were inadequately answered thus were excluded. A total of 229 questionnaires were accepted for the study.

Two hundred ten of the 229 children were boys and 19 of them were girls. One hundred thirty five of them had right sided, 66 had left sided and 28 had bilateral hernia. While 149 families (65 %) preferred the outpatient treatment, 58 families (25 %) preferred the inpatient treatment. Twenty two families (10 %) stated that they didn't have any idea.

The outpatient and inpatient preference rates concerning the age of the child, the place of families' residence, the hospitalization for operative treatment of another family member, hospitalization of their children for any other reason, contralateral hernia after the operation and hernia recurrence are shown in Table 1. These factors did not influence the family preference significantly ($p>0.05$).

However, postoperative complaints and the type of hospital at which the child was operated, had effects on the parents' choice. Of the 177 patients who were treated in the State Hospital 105 families (59 %) preferred outpatient treatment. The outpatient preference was 83 % in the 52 patients who were operated on in a private hospital (Figure 1). The type of hospital influenced the choice significantly ($p<0.01$).

Table 1. Distribution of family preferences and effecting factors

	Total number	Out patient (%)	In patient (%)	No idea (%)	
AGE					
0-1	56	42 (75)	10 (18)	4 (7)	NS
2-5	109	67 (62)	28 (26)	14 (12)	
6-12	64	40 (63)	20 (31)	4 (6)	
FAMILY RESIDENCE (IN OR OUT THE CITY)					
IN	109	78 (72)	21 (19)	10 (9)	NS
OUT	120	72 (60)	36 (30)	12 (10)	
TYPE OF HOSPITAL					
STATE	177	105 (59)	54 (31)	18 (10)	(*)
PRIVATE	52	43 (83)	5 (10)	4 (7)	
OPERATION SIDE					
UNILATERAL	201	133 (66)	50 (25)	18 (9)	NS
BILATERAL	28	16 (57)	8 (29)	4 (14)	
POSTOPERATIVE COMPLAINT					
YES	30	10 (33)	18 (60)	2 (7)	(*)
NO	199	139 (70)	40 (20)	20 (10)	
CONTRALATERAL HERNIA AFTER FIRST OPERATION (@)					
YES	8	6 (75)	2 (25)	0 (0)	NS
NO	193	127 (66)	48 (25)	18 (9)	
OPERATION OF ANOTHER FAMILY MEMBER					
YES	72	40 (56)	24 (33)	8 (11)	NS
NO	157	109 (69)	34 (22)	14 (9)	
HOSPITALIZATION OF CHILDREN FOR ANY OTHER REASON					
YES	52	28 (54)	18 (35)	6 (11)	NS
NO	177	121 (68)	40 (23)	16 (9)	
Total	229	149 (65)	58 (25)	22 (10)	

(@): 201 patients with unilateral hernia
NS: Not significant
(*): $p<0.01$

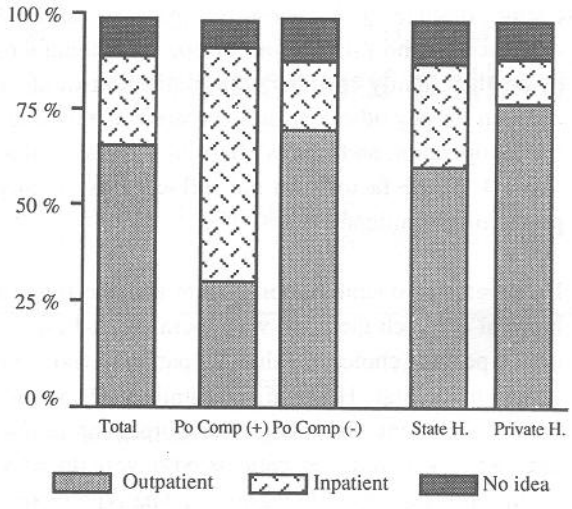

Figure 1. The two significant factors effecting family preference

While 30 families (13 %) indicated that they had postoperative complaints, 199 (87 %) did not have any problems. The outpatient preference was 33 % (10 families) in the postoperative complaint group. In the no complaint group this was 70 % (Figure 1). The difference was statistically significant ($p<0.01$). The postoperative complaint rates were 18 % in the private hospital group and 17 % in the State Hospital group. The difference was statistically nonsignificant ($p>0.05$).

A total of 225 families were satisfied with the treatment and found the operation successful except the four families with postoperative complications. In the postoperative complaint group parents stated that, their most important problem was the fear regarding the postoperative care of the child at home.

There was no significant difference in outpatients preference of the families during the study period.

Discussion

It is thought that the high migration rate in our country has caused a low reply rate to questionnaires (38 %) in this study. We believe that the population of present study symbolizes the general inguinal hernia population, because present ratios related with inguinal hernia are found similar to the ones obtained from the same city, another big city of Turkey and other countries [1,5,6].

Due to cummulated experience of population in the course of time it was expected that the families' outpatient preference will increase with years. However we could not shown such a trend. Our mistake was to expect the same family preference both at the year of the operation and today. The families continue to live in the same population and share the populations' outpatient surgery practice after their own experience. So their preference will change after the operation year and a standard outpatient preference rate will be detected after five years.

Outpatient pediatric surgery has many advantages for the patients, parents and the hospital staff. Shorter time of separation of the child from his environment makes him and his family content and decreases the psychological problems due to hospitalization [3,7]. In addition, it is preferred by the hospital staff because of low hospital bed occupation and infection rates. However, sending the child back home postoperatively creates anxiety in parents. They are left alone with their problems and they are faced with difficulties of postoperative care of the child. Although only four children had postoperative complications, it is interesting that 30 families (13 %) still remembered their anxiety. Although not related to complications, after five years, parents stated that their major problem was the fear of postoperative care of the child. The effect of this fear on parents' choice was significant. On the other side, the age of the child and size of the operative repair (unilateral or bilateral) did not influence the preference.

A previous experience with a Health Center was not an important factor for the families' preference also. Hospitalization of their children for any other reason or hospitalization of a family member did not change the parents' choice. Additionally, there was no difference between the families residing within the city and the families coming outside the city. We conclude that parents' fear was the primary factor in determining their preference, rather than their good or bad experiences with hospitalization.

In this country most of the surgeons in State hospitals work part-time. Patients examined in private offices can be operated both in the State hospitals or private hospitals depending on the patients' choice. Surgeons have to perform high-volume surgeries in

State hospitals, while small number of operations in performed in private hospitals. 350-600 pediatric operations are done yearly in the State hospital at which the author worked. While 59 % of the families whose children were operated in the State hospital prefered outpatient treatment, preference increased to 83 % among children operated in private hospitals. The same preoperative informations were given to both groups in the private office, but we think that perioperative informations were not adequate in the State Hospital. The greater number of patients being treated in the State hospital may have caused the inadequate perioperative informative discussions in private hospitals. The similar postoperative complaint rates obtained from both hospitals show that the procedures are not different in the two groups. Parents of children treated in private hospitals remembered their problems but most of them still favored the OPSP.

Our study showed that, perioperative informative discussions have positive effects on OPSP preference. It is also important for eradication of families' fear due to the procedure. OPSP in high-volume surgery centers may not give sufficient opportunities for informative discussions and eradication of this fear. Outpatient surgery centers and the operation teams must be separated in order to facilitate perioperative relations.

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