

Original Research Article

Evaluation of Effect of Education on parental anxiety before and after of voiding cystourethrogram

Saida Parvaresh¹, Azam Gholami Shahre Babak*², Ali Hosseinasab³, Saida Elahi⁴, Navid Gharaee⁵

¹Professor of Pediatric Nephrology, Kerman University of Medical Sciences, Kerman, Iran

²Resident of Pediatrics, Kerman University of Medical Sciences, Kerman, Iran

³Specialty pediatric infectious diseases, Kerman University of Medical Sciences, Kerman, Iran

⁴Bachelor of Nursing, Kerman University of Medical Sciences, Kerman, Iran

⁵The medical student, Shahid Beheshti University, Tehran, Iran

*Corresponding author

Azam Shahre Gholami Babak

Email: phdbyresearch58@gmail.com

Abstract: Voiding cystourethrogram is the golden test for diagnosis of bladder reflex to ureter. Increase of anxiety has interference with ability of parents for helping to children. Our study was done with goal of taking an appropriate intervention for decrease of anxiety on parents of children that have VCUg. Our study is one-side blind clinical trial. Standard questionnaire of Spielberger before and after of VCUg in the both groups was completed with this different that in the case group necessary explanation about VCUg given to parents significant level of study was 0.05 and data was analyzed with spss18. Frequency of state anxiety after VCUg with separation of groups was: in the case group 3.5% of parents have mild anxiety, 45.9% moderate and 1.2% severe anxiety. in the control group 9.4% have mild anxiety, 37.6 moderate and 2.4% severe anxiety. No significant different watch between groups. (P Value = 0.194). The result of this study shoe that explanation about VCUg can not decrease anxiety of parents.

Keywords: Education, Anxiety, Urinary cystourethrogram.

INTRODUCTION

Cystourethrogram urine or voiding cystourethrogram (VCUG) golden diagnostic test for the detection of vesicoureteral reflux and a number of other bladder problems [1]. The process of doing VCUG in infants and children is done in the radiology department [3]. The process of doing this causes stress and anxiety for children, parents and even health workers are involved in health centers [2].

Increased tension and anxiety of parents, children affected in two ways: First, increased anxiety interferes with the ability of the parents to help the child, the child's anxiety to be transferred [3].

The anxious parents withdrew their children and participate in their care less. Parents who are anxious to help and care for her child to be less difficult. The main fear is that child care by parents for her baby from a hospital or medical procedures that can be done on behalf of children and better cooperation with the medical procedure or hospitalization [4].

Parents always incomplete information provided by the medical team about the child's

condition and treatment of complaints. They require that this information be transparent and understandable words to help provide better so they can make decisions about the care of children [5].

Aire = This test is a qualitative located in a variety of multiple choice questions for the trait and state scales are different. Anxiety (trait): the subjects were asked to respond to this type of anxiety and a general feeling your usual often identified and their severity on a scale of one to four for options almost never, sometimes, often and almost always a rATING

And state (state): the subjects were asked to respond to the anxiety of feeling at the moment, and right now (ie, at the time of the test) state and its severity on a scale of one to four for options no, sometimes, often a very high rating. Its reliability satisfactory concurrent validity and reliability of the method according to Cronbach's alpha was 0.91 and for the anxiety trait anxiety scale showed 0.90 [6].

Spielberger anxiety and state (state): the subjects were asked to respond to the anxiety of feeling at the moment, and right now (ie, at the time of the test)

state and its severity on a scale of one to four for options no, sometimes, often a very high rating. Its reliability satisfactory concurrent validity and reliability of the method according to Cronbach's alpha was 0.91 and for the anxiety trait anxiety scale showed 0.90 [6].

Because the process is a process of VCUg catheterization, contrast injection and rays, and children and parents are strongly influenced by the stressful situation and considering that the impact of education and training to parents on reduce parental anxiety is not clear and has a study been conducted in accordance with the culture and specific conditions in Iran, this study aimed to get appropriate interventions to reduce the anxiety and stress on the parents of children who VCUg Mygyrndtrahy, and to do so.

METHODS

Our study is a single-blind randomized clinical trial that the parents of hospitalized children or children referred to hospitals in Kerman Afzalipour. So that only biostatistics expert in statistical analysis in the study groups was blinding to treatment groups and did not know which group the intervention was done.

Inclusion criteria include patients who have parents, and informed written consent to participate in the study Exclusion criteria included lack and dissatisfaction and to continue the study.

After being patient for parents about goals, how to run, how blind the drug and its possible complications and follow-up of patients by the investigator explanations given to parents researcher then asked questions to ensure understanding of the patient and their presentations was.

After filling the form, written consent of the study and during the study, patients who did not have consent to continue participating in the scheme were excluded from the study.

After confirming the Czech patient Parents collect demographic and anxiety Spielberger list that previous studies measured the validity and reliability of

the Persian language [6] was given to them by researchers. Then randomly, based on a random numbers table they were in two groups.

For the first group, by Resident pediatrics information about VCUg from baseline on the basis of information extracted from evidence-based resources (EMBASE & Up To Date) and clinical experiences specialty pediatric nephrology and by Professor of Psychology, Pediatrics language simple on paper was prepared for purely oral presentation before the VCUg patients returned to their parents. All patients were in this group were trained by a pediatric residents and residents from baseline by specialty by specialty pediatric nephrology and pediatric psychology training and exam requirements for the interview he was taken. For the second group was not given any training.

During data collection, this issue was carefully crafted to try any of the patients in each group and the group that are not connected to the information they prevent errors.

After VCUg parents were asked which ranged from zero to half an hour after the VCUg and child out of the photograph again to complete Spielberg Anxiety Inventory action.

After collecting the data, for each person is given a code and name of the intervention group was blinding and the information obtained from the questionnaires were entered and analyzed with SPSS software.

At the end of the data after entering the SPSS software, descriptive measures of central tendency and dispersion after using chi-square tests by independent Vty were analyzed.

RESULTS

Overall, 85 patients participated in this study, of which 43 cases (intervention) and 42 patients in the control group (no intervention), respectively.

The average age of the children studied samples was 40 ± 44 months.

Table-1: Average age children per month

No	minimum	maximum	average	standard deviation
85	0.00	204.00	44.9412	40.57250

The 1/87% of children and 12.9 percent of boys were girls. (The frequency of sex in the two groups showed no significant difference (P Value = 0.195)

In this study, 16.9% of patients with the disease, and 8/51 patients had a history of shooting as well as 5.9% of patients with a positive family history had VCUg is performed.

The average age of fathers in this study, 35.65 and 31.67 had a mean age of mothers.

The 37.3 of mother, father and 61.4 (1.2%) of parents both your child and perfect mother 80.7 percent, 8.4 percent and 10.8 percent of parents both parents questionnaires were completed.

Studied the frequency of parental education was as follows: 31 years

In reviewing the responses that parents have anxiety questionnaire, the following results were achieved:

The first questionnaire to explain the process VCUG (intervention) and even before the VCUG were completed by parents following results were obtained:

In response to questions trait anxiety (trait) in about 7.0 percent of parents with mild anxiety, anxiety 93.0% average and 0.0% had severe anxiety.

In response to questions trait anxiety (trait) in the control group 11.9% of parents with mild anxiety, anxiety 85.7 percent average and 2.4% had severe anxiety. (It should be noted a significant difference between the two groups was observed (P Value = 0.428))

In response to questions on state anxiety (state) in the case of 39.5 percent of parents with mild anxiety, 60.5 percent had moderate anxiety.

In response to questions on state anxiety (state) in the control group 26.2% of parents with mild anxiety, 73.8 percent had moderate anxiety. (It should be noted between the two groups was not significant (P Value = 0.250).

The second questionnaire after explaining the VCUG (intervention) and after the VCUG were completed by parents following results were obtained:

In response to questions on state anxiety (state) in about 7.0 percent of parents with mild anxiety, anxiety 90.7 percent average and 2.3% had severe anxiety.

In response to questions on state anxiety (state) in the control group were not given an explanation 19.0 percent of parents become anxious, mild, moderate anxiety 76.2 percent and 4.8 percent had severe anxiety.

In another study that the results of the questionnaire (state) and explain the steps before and after the VCUG was performed in two groups Rsydydm concluded that the results of the questionnaire in the study group (P Value = 0.175) and in the control group. (P Value = 0.181) did not show a significant difference.

Many state anxiety (state) after the VCUG to distinguish three groups as follows:

In the study group, 7.0 percent of parents with mild anxiety, anxiety 90.7 percent average and 2.3% had severe anxiety. And 19.0 percent in the control group of parent's anxious mild, moderate anxiety and 4.8% had severe anxiety between the 76.2 of a significant difference between the two groups. (P Value = 0.194)

DISCUSSION

This clinical trial was carried out on parents, patients who were candidates for vcug was done so that the number of parents randomly placed in two groups, the group how to do, procedures and Indications vcug described in the control group parents remain without explanation after completing vcug parents were asked to re-form Spielberg's anxiety to complete the survey and collected data comparison and analysis was.

In response to questions trait anxiety (trait) in about 7.0 percent of parents with mild anxiety, anxiety 93.0% average and 0.0% had severe anxiety.

In response to questions trait anxiety (trait) in the control group 11.9% of parents with mild anxiety, anxiety 85.7 percent average and 2.4% had severe anxiety. (It should be noted a significant difference between the two groups was observed (P Value = 0.428)).

In response to questions on state anxiety (state) in the case of 39.5 percent of parents with mild anxiety, 60.5 percent had moderate anxiety.

In response to questions on state anxiety (state) in the control group 26.2% of parents with mild anxiety, 73.8 percent had moderate anxiety. (It should be noted between the two groups was not significant (P Value = 0.250).

The second questionnaire after explaining the VCUG (intervention) and after the VCUG were completed by parents following results were obtained:

In response to questions on state anxiety (state) in about 7.0 percent of parents with mild anxiety, anxiety 90.7 percent average and 2.3% had severe anxiety.

In response to questions on state anxiety (state) in the control group were not given an explanation 19.0 percent of parents become anxious, mild, moderate anxiety 76.2 percent and 4.8 percent had severe anxiety. In another study that the results of the questionnaire (state) and explain the steps before and after the VCUG was performed in two groups Rsydydm concluded that the results of the questionnaire in the study group (P Value = 0.175) and in the control group. (P Value = 0.181) did not show a significant difference.

Lee and colleagues in a study in 2010 on 68 parents of children who should be VCUG was performed on patients in the intervention group for Brvshvrmsvr before the VCUG was explained, indicating that the level of parental anxiety about the before and after VCUG show a statistically significant reduction [7] However, unlike this study is that our

results can be found in an understanding of the different subjects.

In a study on 105 patients Lachenmyer and colleagues in 2013, a clinical trial using the brochure description about VCUG via email and introduce useful links to families of patients to assess the effect of reducing the amount of parental anxiety about the VCUG parents report before it was determined that this training has no effect on the level of parental anxiety about the VCUG but this training is cooperation and awareness of parents about raises 8 study of the result of obvious study consistent relatively .

CONCLUSION

The results of the study would be picked explained about the process of doing VCUG will not be able to reduce stress and anxiety, psychological parent

REFERENCES

1. Matthews KE, Mines RD, Pakula LC; initial Urinary Tract infection in Febrile Infants and Young Children. *Pediatrics*, 1999; 103(4): 843.
2. Phillips D, Watson A, Collier J; Distress and radiological investigations of the urinary tract in children. *European journal of pediatrics*, 1996;155(8): 684-7.
3. van der Bruggen CO, Bögels SM, van Zeilst N; What influences parental controlling behaviour? The role of parent and child trait anxiety. *Cognition and Emotion*, 2010; 24(1):141-9.
4. Scott LD; Perceived needs of parents of critically ill children. *Journal for Specialists in Pediatric Nursing*, 1998; 3(1):4-12
5. Lopez-Alvarenga J, Vazquez-Velazquez V, Arcila-Martínez D, Sierra-Ovando A, González-Barranco J, Salín-Pascual R; Accuracy and diagnostic utility of the Hospital Anxiety and Depression Scale (HAD) in a sample of obese Mexican patients]. *Revista de investigación clínica; organo del Hospital de Enfermedades de la Nutrición*, 2002; 54(5):403-9.
6. Khosroshahi SB, Pouretmad H, Khooshabi K; The effect of little bird program in decreasing roblem behaviors of autistic children. *Procedia Social and Behavioral Sciences*, 2010; 5: 1166–117.
7. Lee NR, Oh JM, Yim HE, Yang JW, Yoo KH, Hong YS, et al.; Difference of Anxiety of Parents: before & after the VCUG. *Journal of the Korean Society of Pediatric Nephrology*, 2010;14(1): 62-70.
8. Lachenmyer LL, Anderson JJ, Clayton DB, Thomas JC, Pope Jct, Adams MC, et al.; Analysis of an intervention to reduce parental anxiety prior to voiding cystourethrogram. *Journal of pediatric urology*, 2013.