

Original Research Article

Urethral stricture disease: a qualitative survey to assess mental status of the patients

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Received: 03 June 2022

Revised: 01 July 2022

Accepted: 02 July 2022

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ABSTRACT

Background: Urethral stricture patients are often associated with general anxiety disorders. So, our objective was to gather the data of manifestation of anxiety disorder in urethral stricture patients.

Methods: We had measured the anxiety level of these patients after two weeks of insertion of catheters (with catheter) and again two weeks after removal of catheter (without catheter) by using the '7-item generalized anxiety disorder' (GAD-7) tool.

Results: During the data analysis we have found that amongst the 56 patients included in the study 24 patients had minimal, 12 patients had mild, 11 patients had moderate and 9 patients had severe level of anxiety after 2 weeks of insertion of catheter. Later on, two weeks after removal of catheter 32 patients had minimal, 14 patients had mild, 7 patients had moderate level and 3 patients had severe level of anxiety.

Conclusions: So, it can be concluded that urethral stricture disease with an indwelling catheter is an important cause of moderate to severe anxiety and proper intervention plan is crucial for all patients before and after inserting catheter.

Keywords: Urethral stricture, Anxiety, Quality of life, Qualitative

INTRODUCTION

GAD is one of the most frequent anxiety disorders observed in regular medical practise and in the general public. The condition has a current frequency of 2.8 percent to 8.5 percent in general medical practise 1-3 and 1.6 percent to 5.0 percent in the general population.⁴⁻⁶ Urinary retention in young male patients can be caused by urethral stricture illness. Urinary retention may require catheterization to be relieved. To relieve urine retention, many of these individuals require suprapubic catheter placement, urethroplasty, or other surgical surgery. All of

these therapies have an impact on the patient's physical, social, sexual, and mental health.^{7,8}

Common anxiety disorders in the patients with urinary catheter (either per-urethral or supra-pubic) has been recognized in several studies and it has also documented that excess morbidity and health care utilization and expenses are attributed to long term urinary catheter.⁹ Therefore, our objective was to have a qualitative survey to collect data on the manifestations of anxiety disorder in urethral stricture patients and to build a particular intervention plan to enhance their quality of life.

METHODS

The study was conducted in the surgery out-patient and in-patient department of Upasam Nursing Home Private Limited situated at Uttar-Dinajpur district of West Bengal.

The study period was from January 2017 to March 2022. It was a qualitative survey of young male patients (18-65 years age group) presented with acute urinary retention due to urethral stricture disease, in which Foley's catheter was inserted through urethral or suprapubic route to relieve the urinary obstruction.

It was a descriptive qualitative study. Simple random sample techniques were applied for sampling.

The patients who had given consent for the study were included and those who had not given the consent were excluded from the survey. The patients who had presented

with acute retention of urine and associated with other comorbid diseases were also excluded from the survey.

We had measured the anxiety level of these patients after two weeks of insertion of catheters (with catheter) and again two weeks after removal of catheter (without catheter) by using the GAD-7 which was a self-report measure of anxiety instrument and was reliable as well as valid (Figure 1).

Scoring of the items were: score 0-4: minimal anxiety, score 5-9: mild anxiety, score 10-14: moderate anxiety, and score greater than 15: severe anxiety.

Measured scores (with catheter) were compared with the (without catheter) scores and the changes had been analysed by using simple statistical methods. Simple statistical techniques were applied for statistical analysis of the data.

GAD-7				
Over the last 2 weeks, how often have you been bothered by the following problems?	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it is hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid as if something awful might happen	0	1	2	3
Total Score — = Add Columns — + — + —				

Figure 1: GAD 7 scoring system.¹⁶

RESULTS

In our study we have included 56 young male catheterised participants. They were in 18 to 65 years age group. They were divided into five groups. Among them 11 were in the age group of 18 to 25 years, 14 were in the age group of 26 to 35 years, 13 were in the age group of 36 to 45 years, 10 were in the age group of 46 to 55 years and 8 were in the age group of 56 to 65 years (Table 1).

According to GAD-7 scores of anxieties: minimal anxiety present in 24 patients with catheter of whom 5 were in the age group of 18-25 years, 7 were in the age group of 26-35 years, 6 were in the age group of 36-45 years, 4 were in the age group of 46-55 years and 2 were in the age group of 56-65 years. Mild anxiety present in 12 patients with catheter of whom 3 were in the age group of 18-25 years, 2 were in the age group of 26-35 years, 3 were in the age group of 36-45 years, 3 were in the age group of 46-55

years and 1 were in the age group of 56-65 years. Moderate anxiety present in 11 patients with catheter of whom 2 were in the age group of 18-25 years, 3 were in the age group of 26-35 years, 3 were in the age group of 36-45 years, 1 was in the age group of 46-55 years and 2 were in the age group of 56-65 years. Severe anxiety present in 9 patients with catheter of whom 1 was in the age group of 18-25 years, 2 were in the age group of 26-35 years, 1 was in the age group of 36-45 years, 2 were in the age group of 46-55 years and 3 were in the age group of 56-65 years (Tables 1 and 2).

According to GAD-7 scores of anxieties: minimal anxiety present in 32 patients without catheter of whom 7 were in the age group of 18-25 years, 10 were in the age group of 26-35 years, 7 were in the age group of 36-45 years, 5 were in the age group of 46-55 years and 3 were in the age group of 56-65 years. Mild anxiety present in 14 patients without catheter of whom 3 were in the age group of 18-25 years,

2 were in the age group of 26-35 years, 4 were in the age group of 36-45 years, 3 were in the age group of 46-55 years and 2 were in the age group of 56-65 years. Moderate anxiety present in 7 patients without catheter of whom 1 was in the age group of 18-25 years, 2 were in the age group of 26-35 years, 1 was in the age group of 36-45 years, 1 was in the age group of 46-55 years and 2 were in the age group of 56-65 years.

Severe anxiety present in 3 patients without catheter of whom 1 was in the age group of 36-45 years, 1 was in the age group of 46-55 years and 1 was in the age group of 56-65 years (Tables 1 and 2).

In this study a statistical significance was traced in minimum anxiety and severe anxiety disorder of total 56 patients who were undergone with and without catheter. Only 24 patients reported minimal anxiety while 32 patients in the cohort of 56 patients reported minimal anxiety after removal of catheter, (p=0.00419, p and It: 0.05). On the other hand, a statistical significance was also reacquired in measuring severe anxiety, 9 and 3 patients respectively with and without catheter strata (p=0.01749, p and It: 0.05) (Table 2).

Table 1: Age group wise distribution of patients and anxiety status with and without (after removal) catheter.

Age group (years)	Number of patients	With catheter				Without catheter			
		Minimal anxiety	Mild anxiety	Moderate anxiety	Severe anxiety	Minimal anxiety	Mild anxiety	Moderate anxiety	Severe anxiety
18-25	11	5	3	2	1	7	3	1	-
26-35	14	7	2	3	2	10	2	2	-
36-45	13	6	3	3	1	7	4	1	1
46-55	10	4	3	1	2	5	3	1	1
56-65	8	2	1	2	3	3	2	2	1

Table 2: Number of patients with minimal, mild, moderate and severe anxiety levels and statistical analysis.

GAD 7 anxiety index	Number of patients with catheter	Number of patients without catheter	Z value	P value	Remarks at p<0.05	One sample Z proportional test	P value	Remarks at p<0.05
Minimal anxiety	24	32	-1.5119	0.1310	Not significant	2.8633	0.0041	Significant
Mild anxiety	12	14	-0.4476	0.6527	Not significant	1.079	0.2802	Not significant
Moderate anxiety	11	7	1.0291	0.3030	Not significant	-1.81	0.0693	Not significant
Severe anxiety	9	3	1.5275	0.1266	Not significant	-2.3762	0.0174	Significant

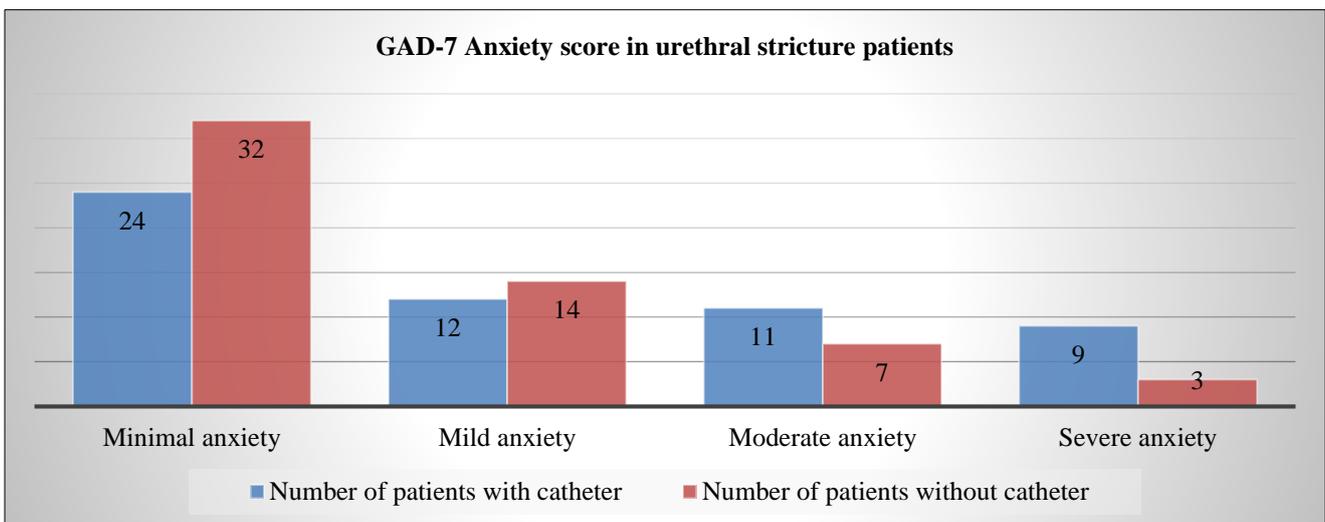


Figure 2: Column diagram depicting anxiety scores of urethral stricture patients.

DISCUSSION

In this study, we employed the GAD-7 scale, which included seven typical anxiety symptoms: feeling nervous, anxious, or on edge; not being able to stop or control anything; worrying excessively about various things; trouble relaxing; being so restless that it is difficult to sit still; becoming easily annoyed or irritable; and feeling afraid as if something terrible might happen (Figure 1).

We discovered that after two weeks following catheter placement, 24 patients had minimum anxiety, 12 patients have mild anxiety, 11 patients had moderate anxiety and 9 patients had severe anxiety among the 56 patients included in the study.

Two weeks after the catheter was removed, 32 patients had minimum anxiety, 14 patients had mild anxiety, seven patients had moderate anxiety and only three patients had severe anxiety. As a result, when the catheter was removed, the level of anxiety in a few of the patients decreases (Figure 2).

The majority of patients were frightened, apprehensive, terrified, and humiliated about their illness process, according to qualitative research in which authors conducted in-depth interviews with 18 patients with urethral stricture disease.¹⁰ The emotional discomfort suffered by direct family members of patients with urethral structure was measured in research by Weese et al. Sleep disturbances, less social engagements, mental stress and a lack of sexual intimacy are among the issues.¹¹

Another study of qualitative survey out of 43 patients studied 24 had mild anxiety with catheter which increased to 37 after removal of the catheter, and 19 patients had moderate to severe level anxiety which decreased to only 6 after removal of catheter.¹² Jared et al found anxiety and depression in 86 (29%) patients of urethral stricture disease and postoperative anxiety and depression was present only in 10% of patients.¹³

In the studies conducted by Whybrow et al the finding discloses how patients tend to develop routines and tactics to adapt to their symptoms of disease and hide them from others rather than seek help.^{14,15}

As a result, the goal of this study was to analyse and compare the anxiety levels of urethral stricture patients with and without catheters using the GAD-7 instrument. After the catheter was removed, we saw a significant improvement in mental condition.

Limitations

The study had limitations in that we have no data on our patient's anxiety levels before to their illness process and the number of patients included in the study was low.

CONCLUSION

Our study showed that most of the patients with urethral stricture had some degree of anxiety, mostly had minimal and mild degree of anxiety but some had moderate and even severe degree anxiety. After the catheter was removed, we observed a significant improvement in mental condition. So, it can be concluded that urethral stricture disease with an indwelling catheter is a vital cause of moderate to severe anxiety and proper counselling is essential for all patients before and after inserting catheter to reduce anxiety and to improve the quality of life of the patients.

The study's future direction: we have a strategy in place for definitive intervention of these urethral illness patients with anxiety problems in order for them to have a better life in the future.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Bhattacharyya KS, Paul P, Paul S, Chowdhury PD, Paul UK. Urethral stricture disease: a qualitative survey to assess mental status of the patients. *Int Surg J* 2022;9:1455-9.