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A STUDY OF AETIOLOGY, PATHOLOGY AND MANAGEMENT OF URETERIC STRICTURE:

Urology

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ABSTRACT

In our country ureteric Strictures are quiet commonly encountered. Renal Calculi is frequently encountered especially in this part of the costal India and are quiet commonly regarded as one of the main cause of the Ureteric strictures. The irony is the procedure for treatment is also regarded as one of the main culprit for causing the Ureteric Stricture. In our country tuberculosis is also encountered frequently and is one of the leading cause for the same. So this study is done to understand the aetiology, understanding the underlying pathology and the commonest treatment for the same.

KEYWORDS

aetiology, pathology, management, ureteric stricture.

INTRODUCTION:

Ureters are a thick walled tubes which convey urine from the corresponding kidneys to the urinary bladder. Each ureter is about twenty to twenty five cms in length and approximately 3mm in diameter. It consists of mainly three parts namely pelvis of ureter, abdominal and the part which lies in the pelvis. Pelvis of the ureter is a funnel shaped dilatation of the upper part of the ureter and it is formed within the renal sinuses by the union of the major calyces. Abdominal part passes downwards and slightly medially beneath the peritoneum and enters the pelvis crossing major arteries. Pelvic part has another three parts. First part is the vertical part and descends vertically downwards. Second part is the oblique part and the third part is the intra-vesical part. There are three constrictions of the ureter. First is at the level of pelvi-ureteric region which corresponds to the lower pole of the kidneys, second is the pelvic brim and the third one is when it pierces the bladder. Histologically from outside inwards it consists of fibrous layer, muscular layer and the mucous layer.

In our country ureteric Strictures are quiet commonly encountered. Renal Calculi is frequently encountered especially in this part of the costal India and are quiet commonly regarded as one of the main cause of the Ureteric strictures. The irony is the procedure for treatment is also regarded as one of the main culprit for causing the Ureteric Stricture. In our country tuberculosis is also encountered frequently and is one of the leading cause for the same. So this study is done to understand the aetiology, understanding the underlying pathology and the commonest treatment for the same.

Aims and Objectives:

To study and understand the aetiology, understanding the underlying pathology and the commonest treatment employed for ureteric strictures.

Materials and Methods:

This study was done in K.S.Hegde Medical Academy. This study was done in the Department of Urology.

The study was done from February 2017 to July 2018.

This study was done using a sample size of Thirty Patients.

Inclusion Criteria:

1. Patients with Radiological evidence of the stricture were selected.

Exclusion Criteria:

1. Patients with extrinsic compressions.
2. Repeated stricture cases were neglected.

RESULTS:

Table 1: Mean Age of the Patients

Total	Mean Age	Standard Deviation
30	46.98 years	± 9.42 years

Table 2: Sex Distribution:

Table 3: Aetiology and Underlying Pathology

Aetiology	Male	Female
Renal Stone	04	03
Previous Ureteric Procedures	Nil	02
Tuberculosis	02	02
Obstructive megaureters	Nil	01
Malignancy Treatments (Radiation)	03	09
Previous H/O Surgery	01	02
Idiopathic	01	Nil

Table 4: Investigations for the above said aetiology

Aetiology	Investigations
Renal Stone	USG
Previous Ureteric Procedures	USG and Endoscopy
Tuberculosis	IVP, Urine Culture for AFB
Obstructive megaureters	Endoscopy
Malignancy Treatments (Radiation)	Endoscopy
Previous H/O Surgery	Endoscopy
Idiopathic	Nil

Table 5: Treatment

Aetiology	Treatment
Renal Stone	PCNL DJ Stenting
Previous Ureteric Procedures	Endoscopic Ureteric Balloon Dilatation and DJ Stenting
Tuberculosis	• Anti-Tubercular Drugs • Surgical Correction after the active infection was over

Obstructive megaureters	Ureteric Reimplantation
Malignancy Treatments (Radiation)	Stricture Segment Excision with Ureteric Reimplantation
Previous H/O Surgery	Endoscopic Ureteric Balloon dilatation and DJ Stenting
Idiopathic	Endoscopic Ureteric Balloon Dilatation and DJ Stenting

DISCUSSION:

A stricture causes narrowing of the lumen of the ureter and thus leads to functional obstruction. Ureteric endoscopies and other procedures has led to perforations and these are the most common cause of the strictures1,2. Previous surgeries especially gynaecological surgeries and radiation for malignancies, prolapse are also known to cause strictures according to a study3. Ureteric calculi are known to cause strictures4, Endometriosis are known to cause strictures and has been reported in a number of studies5. In our country tuberculosis is also encountered frequently and is one of the leading cause for the same6. Aortic aneurysm is also known to cause especially inflammatory ones are known to cause the same7. Radiation given to pelvic malignancies are the worst types encountered in the Urology practise and has a very poor outcome8. Some authors have tried classifying the strictures into ischaemic i.e the necrotic variety and the non-ischaemic variety9. Majority of the authors have also concluded that shorter the strictures better is the outcome after treatment[10].

In our study the mean age of the population was found to be 46.98 years. Majority of them were females. Radiation injuries secondary to malignancies formed an important aetiological cause. The success rate after the treatment was significantly high.

Conclusion:

Malignancies and the radiation treatment for it forms the bulk of aetiology. Prompt treatment and proper care is the need for better outcome of the disease.

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