

## Study of Incidence of Pyogenic Group of Organisms in Nongonococcal Urethritis Patients

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**Abstract:** To study the Incidence of pyogenic group of organisms in nongonococcal urethritis cases with urine culture and sensitivity in 100 cases. The material for this study consisted 100 male patients of NGU. The incidence of pyogenic group of organisms in NGU patients constitutes 13% remaining 87 cases were negative. We have treated 13 positive pyogenic group organisms cases with as per their culture and sensitivity reports. The cure was assessed by the relief of symptoms and culture sensitivity negative. Hence it can be concluded that the incidence of pyogenic group organisms in the etiology of "Non-gonococcal urethritis cases was 13% in our study.

**Keywords:** Pyogenic group organisms, culture and sensitivity, NGU-PTs.

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### I. Introduction

Sexually transmitted diseases remain the commonest communicable diseases found in the world today and number of patients treated them continue to increase year by year. One of these diseases assuming greater importance recently is "Non-gonococcal urethritis. NGU occurs in both sexes. It is more common in males, it is not unusual in females. The etiology of Non-gonococcal urethritis multifactorial. The various organisms included in the etiology of NGU are chlamydia mycoplasma, pyogenic organisms, protozoa like trichomonas, viruses like herpes simplex, fungi like candidial infections and intraurethral sores like chancre, chancroid, intra urethral foreign bodies. And intra urethral trauma. Pyogenic group organisms is main cause for NGU. We under took this project of studying the incidence of pyogenic group of organisms in Non-gonococcal urethritis cases.

### II. Aim

To study the incidence of pyogenic group organism's patients of Non-gonococcal urethritis cases, who attended in the DVL department, Rajiv Gandhi Institute of Medical Sciences, Kadapa, A.P.

### III. Materials and Methods

The material for this study consisted of male patients of nongonococcal urethritis who attended the DVL Department out patient's department, Rajiv Gandhi Institute of Medical Sciences, Kadapa, A.P. A through clinical examination was done in all cases. The patient was examined to see the urethral meatus, any discharge per urethral, per rectal examination was done to palpate the prostate and note any enlargement and consistency of the gland for necessary cases. The known contacts and wives of married people were brought and investigated. The following investigations were done for every patient midstream urine for culture and sensitivity for pyogenic group of organisms. Gram staining method for diplococci and number of pus cells present per high power field for all cases, wet film for Trichomonas vaginalis, for pus cells. Blood for VDRL was done routinely in all patients.

### IV. Results

All cases were studied by sending midstream urine for culture and sensitivity for pyogenic group of organisms. Out of 100 cases studied 13 cases had their urine culture positive for pyogenic organisms remaining all cases were negative for pyogenic group of organisms in urine cultures. Prostatic wet film and culture examination prostatic wet films showed clumping of pus cells in all patients and Cultures negative for pyogenic groups organisms. Hence out of 100 cases studied in 13 cases urine cultures for pyogenic groups organisms were present.

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The type of pyogenic groups of organisms grown in cultures was as follows.

S.No	Type of Organism	No. Of cases
1.	E.Coli	4
2.	Proteus	2
3.	Pseudomonas	3
4.	Klebsiella	4
Total		13 Cases

**Cases of Urine Culture + ve for Pyogenic Organisms Table**

S.No	Patient Name	Age/Sex	OP No.	Urine for C/S	Susceptible, to antibiotics
1.	K.Saffiuddin	M/39 Yrs	04857	E.Coli >100,000 Org/ml	1.Ciprofloxacin 2.Gentamicin 3.Nalidixic acid
2.	Buchanna	M/22 Yrs	04956	Proteus isolated	1. T.Septran 2. T.Ciprofloxacin
3.	Venkateswarama	M/19 Yrs	07257	E.Coli >100,000 Org/ml	Susceptible, to septran only
4.	Hanumanthu	M/60 Yrs	8049	Pseudomonas Aerogenosa >100,000 org/ml	1.Ciprofloxacin 2.Norfoxacin 3.Gentamicin
5.	Mohan reddy	M/35 Yrs	8805	Pseudomonas Aerogenosa >100,000 org/ml	1. Ampicillin 2.Gentamicin 3.Ciprofloxacin
6.	Anjaneyulu	M/34 Yrs		Proteus isolated >100,000org/ml	1. Kanamycin 2.T.Septran 3.Gentamicin 4.Ciprofloxacin
7.	Kumar	M/30 Yrs	8932	Klebsiellasps isolated more than 1,00,000 org/ml	1.T.Septran 2.Kanamycin 3.Gentamicin 4.Ciprofloxacin 5.Norfloxacine.
8.	Edanna	M/27 yrs	8997	Pseudomonas sps. >1,00,000 org/ml	1. Kanamycin 2.T.Ciprofloxacin 3. Gentamicin.
9.	Narasimhulu	M/25 yrs	9899	Klebsiella species >1,00,000 org/ml	1. Gentamicin 2. T. Septran 3. Ciprofloxacin 4. Norfloxacine 5. Ampicillin
10.	Mariyamma	F/20 yrs	Contact case	Klebsiellasps isolated >1,00,000 org/ml	1.T.Ciprofloxacin 2.T.Norfloxacine 3. T.Septran 4.Gentamicin 5.Kanamycin 6. Nalidixic acid
11.	Venkateswarlu	M/31 yrs	7664	E.Coli isolated >100,000 org/ml	1. Amikacin 2. Netilmicin 3. Nitorfurantoin
12.	Prabhakar	M/22 yrs	11606	Klebsiella isolated >100,000 org/ml	1.T.Ciprofloxacin 2.Gentamicin 3. Kanamycin 4.Norfloxacine 5.Septran
13.	Jaffer	M/36 yrs	12137	E.Coli isolated >100,000 org/ml	1.T.Ciprofloxacin 2.Gentamicin 3.Nalidixic acid 4.Cephalexin

Among the 13 patients who were positive for pyogenic groups of organism's smears for them show negative for diplococci, urine for deposits negative.

**Out of 100 Cases Studied the Number of Cases Associated with other STDs were as Follows.**

S.No.	Associated STD	Number of Patients
1.	Herpes genitalis	6
2.	Pearly penile papules	3
3.	Balanoposthitis	8
4.	Genital scabies	1

#### V. Response to Chemo Therapeutic Agent.

The 13 culture positive cases were treated as per their culture and sensitivity reports. All cases responded well by the treatment their symptoms subsided and cultures it negative after treatment. Cases were followed for two months.

The remaining 87 patients were treated with the following antibiotics.

1. Tab Norfloxacin  
400 mg bid orally daily for 2 wks
2. Tab ciprofloxacin  
500 mg bid orally daily for 2 wks

The cure was assessed by the relief of symptoms and disappearance of pus cells in smears and urine deposits assessed the cure. The urine culture and sensitivity were negative for pyogenic organisms. Hence, it can be concluded that the incidence of pyogenic groups of organisms in “Non- gonococcal urethritis” Cases was 13 percent in our study.

#### IV. Discussion

It is not easy to assess the magnitude of the problem of nongonococcal urethritis in the population (or) in the given area due to lack of reliable estimates as it is not a reportable disease. The culture and lab tests are costly more over a considerable percentage of patients with remain asymptomatic (or) the patient may overlook the mild symptoms of urethritis. Majority of the patients attend the clinics run by unqualified personnel or private practitioners. Among the 100 cases of Non-gonococcal urethritis studied attending the outpatient department of DVL, Rajiv Gandhi Institute of Medical Sciences, Kadapa, A.P. The urine from all patients were tested by culture and sensitivity and only 13 cases had their urine positive for pyogenic groups of organisms and remaining 87 cases were negative for pyogenic groups organisms this condition is commonly seen in the age group of 15 years to 40 years, where the sexual activity will be maximum and the extramarital and premarital exposures are prevalent.

#### V. Conclusion

Our work revealed that the incidence of pyogenic groups of organisms in the etiology of NGU is 13%. As this works is limited to a small number of patients, this needs further study.

The incidence of pyogenic groups of organisms is 13% in 100 cases of nongonococcal urethritis in the department of DVL.

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