NON-SPECIFIC URETHRITIS

By

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It is now well recognised that a considerable proportion of urethritis is not due to gonococcus but due to various other causes. The aetiology of this non-specific urethritis has been of special interest to the venereologists. As such much work has been done in this direction more so, after the advent of penicillin in the early fortys.

The main research has been and is being carried out by the close co-operation of physicians, opthalmologists, paediatricians, venereologists, virologists and bacteriologists.

Non-specific urethritis may be caused by more than one infective agent and the signs and symptoms may vary in severity, the discharge being so slight that it may go unnoticed by the patient or the physician. Many cases of non-specific urethritis have no etiological connection with venereal infection. They may develop independently of any sexual contact. The common causes other than gonococci are.—

i) Bacterial infection;
ii) Virus infection;
iii) Protozoal;
iv) Micotic infection;
v) Due to new growths;
vi) General cachectic diseases;
vii) Infection of the accessory canals of the urethra;
viii) Due to mechanical, thermal or chemical lesion;
ix) Due to non-venereal stricture of urethra;
x) Reflex urethral discharge due to skin infections;
xi) Due to physiological conditions like excessive coitus or masturbation;
xii) Due to chronic alcoholism and
xiii) Chronic infections of prostate.

These are only few which are the common causes of NGU. D. G. ff. Edward has done enough work on PPLO (Pleuro pneumonia like organisms). This PPLO is responsible for NGU and he has said that positive isolation of PPLO is more frequent in the female. Harkness and Henderson-BEEG were able to get cultures positive for both the sexual contacts. PPLO were also cultured by Smith and Mortron from throat and mouth of normal individuals, but not studied sufficiently by the authors to find out whether it was the same strain as genital ones.

NGU CAUSED BY BACTERIA

The incubation period is short, onset acute and discharges slight watery, mucoid and mucopurulent. Sometimes there may be only a watery drop. Clinical

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symptoms are mild. Complications may occur to the posterior part of urethra like involvement of prostrate etc. Progonosis is favourable. *Aetiology*:– Number of micro-organisms of bacterial urethritis supposed to cause this are many. Strepto cocci, Staphylo cocci, B coli, Entero coccus, Pseudo Diptheria as well as PPLO. *Route of Infection*:– Commonly from the female. Another organism that may cause is Treponema urethrale of Oastellani.

Drugs of choice in treatment: are Sulpha, Streptomycin and Tetracycline.

VIRUS INDUCED URETHRITIS

First described by L. Waelsch in 1901. Cardinal features are long incubation period ie. 5 to 16 days, slight subjective symptoms, marked chronicity and resistance to therapy. Discharge is slight to moderate in amount and usually watery greyish or yellowish in colour. Urine may be hazy with threads and this condition may persist for years. Occasionally, complications like epididymitis may occur. This infection is usually seen in males and no females have been reported. The other virus infection which may cause urethritis is the virus causing LGV. In this condition there is mucoid urethral discharge and urine is usually clear without threads and can be easily recognized because of the other clinical feactures of LGV. Recently Dr. Barrie R. Jones has reported inclusion urethritis due to TRIC virus. This he believes may be the cause of considerable proportion of sexually transmitted disease. He has demonstrated this TRIC virus in the cervix of women and conjunctive of babies. There may be a close relationship between virus infection and Reiter's, syndrome which is very controversial. Lindner believes that there may be connection between trachoma and this type of urethritis. Drugs of choice are Sulphonamides and Streptomycin.

URETHRITIS CAUSED BY PROTOZOA

The next one I would like to discuss is the urethritis caused by Trichomonas vaginalis in the male. This condition is not very uncommon and we have been able to find out T-vaginalis in few cases of NGU.

Other protozoa which may cause urethritis is E, Histolytica.

T-Urethritis: Incubation period is usually 4 to 6 weeks. The onset is marked by burning and itching sensation followed by urethral discharge varying in consistency, amount and colour. The course is chronic. There may be remissions and patients may be free of symptoms for months together. The smears are positive and wet smear shows the organisms. *Treatment*:– Both the partners should be treated. *Drug of choice*:– Flagyll in the main, one tablet three times a day for seven days and in the female, treatment is started on fifth day of menstruation for seven days and repeated three times with the same dose.

MYCOTIC URETHRITIS

These are not unusual especially in diabetics. The fungi grow well in the urine of diabetics because of its glucose content. Another pre-disposing factor is damaged epithelium due to any other cause. Monilia, Candida albicans are agronp of

organisms usually found. Dischaarge is usually greenish or dirty greyish. Urine contains plenty of threads. The smear is usually positive for mycotic elements. *Treatment*:—Local application of 2% Silver Nitrate to urethral mucosa with subsequent irrigation of 1/5000 potassium permanganate or 3% boric acid solution. Nystatin has been proved to be very effective. In diabetics, the urine should be kept sugar-free by adequate treatment.

GENERAL CACHECTIC DISEASES

Among general diseases urethral discharge may be seen in allergic eruptions, Lichen planus, pemphigus etc. But this is rare. Urethritis has also been described in acute infectious diseases such as measles, typhoid etc. Urethritis in chronic infectious diseases like tuberculosis, leprosy have been described. There will be other clinical signs of the disease and as such it should not cause confusion.

A primary Chancre in the urethral canal may caues persistent urethritis and in later stages of syphilis urethra may be involved causing urethritis. Treatment of the cause cures the urethritis also.

Condylomata acuminata of urethral canal is rare but cases have been reported. There may be similar lesions in the genitalia. Fulguration or removal is the ideal treatment.

Malignancy of the urethral wall is usually accompanied by secondary urethritis. Primary urethral carcinoma is not rare. Females are usually affected and this may cause a urethral discharge which may go unnoticed in the very early stage. Early diagnosis is difficult. Treatment is surgical and irradiation.

TRAUMATIC URETHRITIS

Causes are many. Characteristic features are sudden onset without incubation period. Symptoms develop rapidly reaching the climax in no time. Inflammation and swelling witn difficalty in micturition, pain, urethral discharge mixed with blood. Passage of catheter may also give rise to bacterial urethritis due to unsterile instrument, Introduction of foreign bodis etc. require special mention. The symptoms subside on removal of causes. Relapses are common and may give rise to chronic urethritis and in males chronic prostatitis and other complications. Passage of urinary salts or calculi also may cause urethritis. During World War II soldiers caused self infliction to avoid going to the front line.

Thermal Urethritis: It is uncommon. Here again passage of a catheter which is hot is an example.

Chemical Urethritis: This is now unknown as we are not using any irrigations.

The next one I want to mention is urethral discharge due to ingestion of strongly spiced food, and excretion of certain drugs through the urine like Iodine, cantherides etc.

Congestive urethritis (posterior part especially) due to chronic hyperaemia due to sexual excess or perversion in sexual activities. These patients may produce symptoms of sexual neurasthenia etc.

Reflex Urethritis: These may be due to scabies of the genital region or Taenia.

Non-gonococcal infection of accessory urethral canals: After an acute attack of gonorrhoea, these accessory canals may get secondarily infected and produce an NGU, when gonococcal infection is treated. Congenital deformities of the genitalia is another common cause.

Next is stricture of the urethra as an aftermath of gonococcal infection or congenital strictures of urethra may be another cause which is not very uncommon causing NGU. NGU in children may be caused by Oxyuris vermicularis, constitutional disturbances like lymphatic constitution may also be the cause.

The most important part to avoid is to adhere to the following few principles in the taeatment of acute gonorrhoea, as I feel that many cases of NGU occur mainly after an acute episode of gonococcal infection :

(i) Treatment of gonorrhoea with suitable antibiotic of which I feel six lacs of P.A.M. is quite enough in the treatment of an early case;

(ii) Early detection of gonococcal infection and treatment of both the partners at the same time;

(iii) Advise the patient not to have any sexual excitement or sexual intercourse for a period of 3 weeks;

(iv) Avoid handling of genitalia like milking to find out discharge;

(v) Absolute rest in bed;

(vi) Avoidance of any work that will increase intra-abdominal pressure including pillion riding;

(vii) Absolute abstinence from alchohol and alchoholic beverages;

(viii) Avoidence of highly spiced food.

These are to be observed for atleast a period of three weeks in case of men and three months (menstrual period) in females.

In the medical College Hospital, Trivandrum study of urethritis is given in tabulated form. Of which the number of NGU is steadily seen going up. The facilities for culture and other investigations were very meagre and as such much investigations could not be performed. Therefore we could not get to a correct diagnosis. For every case of urethral discharge we used to take a wet smear as well as a smear for Grams stain while culture was not regularly done. In few cases Frei's Test also was done. Every patient was interrogated regarding the history of early urethritis etc. NGU is a real menace in the present day because of the misuse of antibiotics which give prompt relief and lack of proper instruction and advice to

the patient. In every case cause must be found out and disease must be eradicated, The treatment of choice in NGU is a combination of Streptomycin and Sulphonomide for a period of 3 to 5 days and in exceptional cases I have given upto 21 days and got the reward. In case of male urethritis due to T–vaginalis Flagyll has cured the cases and particular attention has been given for the female partners in those cases to have treatment with Flagyll thus avoiding recurrence. Tetracyclines and chloramphenicol also are effective in the treatment. It is always better and advisable to avoid urethral irrigation and instillation into the urethra.

YEAR	Gon.			NUO		
	M	F	T	M	F	T
1959	191	16	207	83	Nil	83
1960	84	14	98	85	19	104
1961	140	15	155	92	22	114
1962	84	16	100	112	28	140
1963	140	8	148	110	2	112
Total			708			553

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