

NONSPECIFIC URETHRITIS (NSU) OR NON-GONOCOCCAL URETHRITIS (NGU), THE BIGGEST PROBLEM IN SEXUALLY TRANSMITTED DISEASES (STD)

A Literature Study

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After being nearly beaten by penicillin in the early 1950s, the STD have staged a phenomenal comeback, and are now epidemic or pandemic in most countries of the western world. The reason for this are social, not medical; popularisation of pre- and extramarital sex, a proportion of which is always promiscuous, has facilitated the spread of the organisms concerned, which have overwhelmed the epidemiological defences in many countries.

Apart from this classical pair which head the list of the official venereal diseases, the biggest problem now is NSU or NGU. Increasing even more quickly than gonorrhoea, its incidence is almost double that of male gonorrhoea in some countries (Platts, 1974).

Some authors named it as "the sixth venereal disease", yet no attempt has been made in international level to include NSU among the "official" or legally recognised venereal diseases. This is a reflection of the existing uncertainty regarding the precise aetiology of NSU. An important technical reason for this lack of agreement on the nature of NSU is the unavailability of simple laboratory methods for the isolation and identification of viruses and virus-like agents which have been implicated in hundreds of cases of genital infection, i.e. = Herpes viruses (HVH-2) and cytomegalovirus, Mycoplasma or PPLO, Chlamydia or TRIC-agent, by different investigators in well-equipped research laboratories.

A great deal of controversy in the literature on the precise role of such microorganisms in NSU has centered on their frequent isolation in the genital tract of asymptomatic men and women. One concept is that these widely distributed genital viruses or pseudoviruses are essentially harmless saprophytes which become pathogenic under the influence of gonococcal or other infections, or other factors related to sexual activity by circumstances yet unknown. Doubts regarding their causal relationship to NSU, because they are also seen in normal individuals, are not valid reasoning since the situation simply parallels that of *N. gonorrhoeae*, which also frequently harbored by healthy carrier a point which has not cast any doubt at all on the aetiological relationship of gonococci to urethritis or cervicitis.

Its remarkable incidence pattern - i.e. cases being sporadic and unconnected, and women being clinically uninvolved as well as "non-infective" to other males - almost suggests an allergy of the mucous lining of the male urethra to the vaginal content of a particular female. However, tetracyclines

abolish urethral discharge in 80% of cases, proving that an infective agent (or agents) is involved. The main problem with NSU is its tendency to recur sometimes years later and frequently in multiple fashion.

On the assumption that male NSU may be a group of conditions rather than a single entity, generally, NSU or NGU is considered as unsatisfactory designations for acute, chronic or recurrent urethral inflammation where *Neisseria gonorrhoeae* has been excluded by appropriate microbiological tests.

DIAGNOSIS

Clinically, the usual approach is to make a diagnosis of NSU after excluding gonorrhoea. There are no specific clinical criteria but NSU may be suspected in the presence of the following features (Limson, 1975).

- 1) A long incubation period, from a week to several months.
- 2) An indolent course.
- 3) Tendency to recur months or years after remission of symptoms, either spontaneously or a few days after intercourse, in approximately half of cases.
- 4) The urethral discharge varies in appearance from a slight morning crust to a profuse yellow discharge similar to that of classical gonorrhoea.
- 5) No response to penicillin treatment.
- 6) Frequent coexistence with other STD, i.e., *Trichomonas*, moniliasis, etc.
- 7) Coexistence with conjunctival infection.
- 8) Response to tetracycline treatment in majority of cases.

TREATMENT

Despite the lack of agreement on the aetiology of NSU, there is no doubt that tetracycline or its analogues produce a prompt symptomatic response in 90% of patients, and a permanent remission in 50 to 70% of cases. Sexual partners should be treated simultaneously.

The recommended course of treatment is listed below (Limson, 1975):

Agent	Dose	Duration
Tetracycline	1,500 mg init.,- 500 mg 6 hourly	7 days
Demethylchlortetracycline or Methacyclines or Triple tetracycline	900 mg init.,- 300 mg 6 hourly	7 days
Doxyxycine or Minocycline	300 mg init.,- 100 mg 12 hourly	7 days
Erythromycin	1,000 mg init.,- 500 mg 6 hourly	7 days

CONCLUSIONS

Not adequately realized by the practicing physician is that at least half of the cases of urethritis seen in practice are not due to gonococcus and will not respond to penicillin, but will respond to tetracyclin.

The etiology of NSU is not clear yet, but the role of infective agent (or agents) is clear. The diagnosis is made by exclusion.

Despite the lack of agreement concerning the aetiology, the treatment is relatively simple, and tetracycline is the drug of choice.

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