**Middle East Journal of Medical Case Reports**
ISSN: 2789-8660 (Print) & ISSN: 2958-2121 (Online)
Frequency: Bi-Monthly
DOI: https://doi.org/10.36348/merjmcr.2025.v05i03.001

KUWAIT SCHOLARS PUBLISHER
Website: http://www.kspublisher.com/
Email: office@kspublisher.com

# Gonorrhea can Spread to Internal Genitals

**Siniša Franjić**[1*]
[1]Independent Researcher

**Abstract:** Gonorrhea is a sexually transmitted disease caused by the bacterium Neisseria gonorrhoeae. It is transmitted through vaginal, oral and anal sex. The most common symptoms are white-yellow or yellow-green vaginal discharge, burning during urination and damage to the vulva. It needs to be treated because otherwise it can spread to internal organs, such as the uterus, fallopian tubes and ovaries. Once it spreads, inflammation can occur, and symptoms include pelvic pain, cramps and fever. Sometimes signs of peritonitis, nausea and vomiting also occur. After a long time, the fallopian tubes can become blocked, and therefore infertility.

**Keywords:** Gonorrhea, STD, Female, Male, Health.

**Research Paper**

***Corresponding Author:**
*Siniša Franjić*
Independent Researcher

**How to cite this paper:**
Siniša Franjić *et al* (2025). Gonorrhea can Spread to Internal Genitals. *Middle East Res J. Case Rep, 5*(3): 19-23.

**Article History:**
| Submit: 10.05.2025 |
| Accepted: 09.06.2025 |
| Published: 11.06.2025 |

**Copyright © 2025 The Author(s):** This is an open-access article distributed under the terms of the Creative Commons Attribution **4.0 International License (CC BY-NC 4.0)** which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

## INTRODUCTION

Gonorrhea is a sexually transmitted disease (STD) which overwhelmingly includes the urogenital zones [1]. The essential location of disease in men is the urethra, whereas in ladies the cervix of the uterus. In people practicing oral or anal sex, the oropharynx or rectum can be contaminated. A infant may secure disease from their mother during section through the tainted birth canal. The most common complication of gonorrhea in ladies is pelvic inflammatory disease (PID), and in men, epididymitis. In uncommon occurrences disseminated gonococcal infection (DGI) may occur.

Slang terms utilized to show gonorrhea incorporate: ‘clap’, ‘gleet’, ‘morning drip’, and ‘running rage’.

### STD

Gonorrhea is the moment most commonly detailed bacterial STD [2]. Most urethral contaminations caused by N. gonorrhoeae among men deliver indications. Among women, gonococcal diseases might not create side effects until complications (e.g., PID) have happened. PID can result in tubal scarring that can lead to barrenness or ectopic pregnancy.

N. gonorrhoeae can survive as it were in a wet environment approximating body temperature. It is transmitted as it were by sexual contact (genital, genital-oral, or genital-rectal) with an contaminated individual. It is not transmitted through can seats or other surfaces that have been reached by an contaminated individual. It most commonly contaminates shallow mucous layers and at first produces release and dysuria. Purulent burning urethritis in males and asymptomatic endocervicitis in females are the most common shapes of the illness, but gonorrhea is moreover found at other sites.

Gonorrhea may pick up section into the circulation system from the essential source of contamination and cause a dispersed gonococcal contamination (arthritis-dermatitis disorder) that comprises of fever and chills, skin injuries, and articular involvement.

From an epidemiologic point of view the infection is getting to be more troublesome to control since of the expanding number of asymptomatic male carriers. “Core transmitters,” or people with rehashed contaminations, are accepted to be capable for transmitting the majority of diseases in urban ranges. Antibiotic-resistant strains are also a developing problem.

Bacterial pathology is based on a combination of the entrance of passage and the cell divider characteristics of the specific bacterium. (Antibiotics kill bacteria by interferometer with the cell divider, so the sort of cell divider directs which sorts of antibiotics will effectively kill a certain bacterium.) [3]. Microscopic organisms that live in the blood and inside organs at first make issues as they dissolve tissues to make their way into the body. The harm caused by getting interior the body produces an sickness in itself. But it too clears out the body helpless to other life forms, creating a condition called “secondary disease.” Auxiliary diseases are some

of the time called “complications. ”Many auxiliary illnesses are caused by ordinarily safe commensals that enter parts of the body where they do not have a place. They at that point inadvertently harm anything body portion they have attacked. Vaginal yeast may cause lethal auxiliary diseases if it enters the blood and makes its way to the brain. Mutualistic intestinal microbes will also create disease—including life-threatening anxious framework conditions and kidney damage—by attacking through bruises created by pathogens in the stomach related framework. Neisseria gonorrhoeae causes the sorts of aggravation that allow auxiliary infections.

**Female**

In the female, the gonococci taint mainly the mucosa, uterine cervix and the urethral mucosa, and cause irritation of the fallopian tubes (salpingitis) [4]. Hence, it is a common cause of pelvic provocative infection (climbing disease of the female genital tract). The gonococcal contamination may also spread into Bartholin glands, which are found adjoining to the vaginal hole. The cervical contamination as a rule causes lavish vaginal release; the urethral inclusion is showed by pain and burning on urination. Some women, in any case, have few or no indications of disease but are all things considered competent of transmitting the infection to their sexual partners.

The gonococcal disease may moreover spread upward from the cervix through the uterus into the Fallopian tubes, where, as already famous, it causes an intense salpingitis (salpinx = tube). Some of the time, the tubal disease is taken after by the arrangement of an sore inside the fallopian tube or an canker including both the tube and the adjoining ovary. Gonococcal salpingitis is showed by stomach torment and delicacy together with hoisted temperature and leukocytosis. Scarring taking after the tubal disease may delay transport of the fertilized ovum through the Fallopian tube, causing the pregnancy to create in the tube instep of the uterus, a condition called an ectopic pregnancy (portrayed in the dialog on pre-birth development and infections related with pregnancy). Total hindrance of both tubes by scar tissue squares the transport of a fertilized ovum through the tubes and leads to sterility.

**Male**

In the male, gonococci cause an intense irritation of the mucosa of the front portion of the urethra [4]. The contamination is as a rule showed by a purulent urethral release and significant torment on urination, and if untreated, urethral strictures. Every so often the tainted male may have generally few indications in spite of the fact that he is still competent of tainting others. Be that as it may, gonorrhea is less likely to be asymptomatic in men than in women.

From the front urethra, the contamination regularly spreads by coordinate expansion into the back urethra, prostate, seminal vesicles, vasa deferentia, and epididymides. An disease in both epididymides and vasa deferentia may lead to sterility since the scarring after the contamination may discourage the conduit framework and in this way piece transport of sperm into the seminal liquid. More data is displayed in the dialog of the male regenerative system.

**Rectal Gonorrhea**

Rectal gonorrhea is obtained by anal intercourse [2]. Women with genital gonorrhea may moreover obtain rectal gonorrhea from defilement of the anorectal mucosa by irresistible vaginal release. A history of anal intercourse is the most imperative clue to the determination since the indications and signs of rectal gonorrhea are in most cases nonspecific.

Anoscopic examination of homosexual men uncovers generalized exudate in 54% of culture-positive patients and 37% of culture-negative patients. Numerous contaminated patients have normal-appearing rectal mucosa. These insights emphasize what is by and large observed—that the specificity of the most common signs and side effects of rectal gonorrhea is low. A few patients report torment on defecation, blood in the stools, discharge on underpants, or seriously inconvenience whereas walking.

**Symptoms**

Like chlamydia, gonorrhea contamination in women is frequently asymptomatic [5]. The cervix is the most common location of mucosal contamination. Symptomatic contamination ordinarily shows as vaginal pruritus, postcoital bleeding, profound dyspareunia, and/or odorless mucopurulent discharge.

On examination, the cervix may show up friable with mucopurulent seepage from the cervical os. N. gonorrhea does not influence vaginal epithelium so a moment contamination ought to be looked for if vaginitis is show. Other than cervicitis, the other common diseases from N. gonorrhea include infection of Bartholin’s and Skene’s glands. Urethritis with dysuria and yellowish penile release is the most common introduction of symptomatic gonorrhea in men. On examination, the penis may be erythematous with a purulent release at the meatus. When truant, the release may be communicated by draining the penis.

Gonorrhea contaminations can be show in the rectal region in men and women. In women it can happen since of perianal defilement from a cervical contamination or from coordinate disease from anal intercourse. In men this disease happens since of coordinate introduction through anal intercourse. Most people with rectal gonococcal diseases have few if any side effects; in spite of the fact that anal pruritus, mucopurulent anal release, anal completion, difficult defecation, and rectal bleeding can happen. In serious cases, it is troublesome to separate from inflammatory bowel disease.

Pharyngeal contaminations caused by N. gonorrhoeae as a rule happen after orogenital presentation to an contaminated person. Pharyngeal erythema with or without exudates and front cervical lymphadenopathy may be show. Most cases will suddenly resolve without treatment and do not as a rule result in antagonistic sequelae but treatment decreases the transmission risk.

The range of gonococcal diseases incorporates the taking after [6]:

1. Asymptomatic contaminations: may continue for months if untreated and speak to the majority of contaminations in women and change in introduction for youthful men. Sites conceivably included: urethra, male and female; endocervix; rectum; pharynx.
2. Symptomatic uncomplicated diseases may result in urethritis, cervicitis, proctitis, pharyngitis, bartholinitis, conjunctivitis.
3. Complicated disease incorporates pelvic incendiary illness (PID), epididymitis, Bartholin organ boil, penile edema, periurethral boil, boil of bulbourethral organs (Cowper organs) or sebaceous organs of the prepuce or prepuce (Tyson organs), prostatitis, perihepatitis: complication of salpingitis (Fitz-Hugh-Curtis disorder), seminal vesiculitis.
4. Systemic complications might incorporate dispersed gonococcal infection (DGI); arthritis-dermatitis disorders; gonococcal meningitis, and endocarditis.

**Epidemiology**

Gonorrhea is a disease caused by the bacterium Neisseria gonorrhoeae, a gramnegative diplococcus [1]. It is the moment most commonly detailed communicable infection in the USA, with a predominance rate cresting at 421 per 100,000 populace in men in their 20s and 570 per 100,000 populace in women between the ages of 15 and 24. Gonorrhea is transmitted by hint physical contact and introduction of a helpless mucosal surface, more often than not in the urogenital region, anus, or even the oropharynx. A common urban legend states that gonorrhea may be contracted by contact with a sullied can situate, but this is unfounded.

**Neisseria Gonorrhoeae**

N. gonorrhoeae is a gram-negative coccus that taints columnar or cuboidal epithelium [2]. The neutrophilic reaction makes a purulent release, and recolored smears appear huge numbers of phagocytosed gonococci in sets (diplococci) inside polymorphonuclear leukocytes. Nucleic corrosive intensification tests give quick and exact diagnosis.

N. gonorrhoeae is a delicate living being that survives as it were in people and rapidly kicks the bucket if all of its natural necessities are not met. The living being can survive as it were in blood and on mucosal surfaces counting the urethra, endocervix, rectum, pharynx, conjunctiva, and prepubertal vaginal tract. It does not survive on the stratified epithelium of the skin and postpubertal vaginal tract. The bacteria must be kept wet with isotonic body liquids and will pass on if not kept up at body temperature. A somewhat soluble medium is required, such as that found in the endocervix and in the vagina during the quick premenstrual and menstrual stages. The antibodies delivered amid the disease offer small assurance from future assaults. A fluorescent counter acting agent test distinguishes the life form in tissue examples such as in the skin in dispersed gonococcal contamination (bacteremia-arthritis syndrome).

**PID**

If the acute gonorrheal endocervicitis remains untreated, the disease may spread to include the endometrium, fallopian tubes, ovaries, and pelvic peritoneum [7]. This complex disorder is the most regularly experienced, serious, and crippling complication of gonorrhea. Around 90% of women with acute illness complain of lower stomach pain starting with or expanding at the time of menses. This is in differentiate to patients with nongonococcal inflammatory disease where the onset of side effects is equitably disseminated all through the cycle. Vaginal release is a indication in 55% of cases, menstrual abnormality happens in 33% of cases, and dysuria is found in 10% of cases. The starting pelvic exam uncovers adnexal delicacy in 90% of the cases, a discernable mass in 50% of the cases, and generally torment with movement of the cervix is famous. A temperature more prominent than 100.4°F is famous in around 40% of women. The gonococcus is refined from the cervix in 80% of starting scenes of PID but drops to 50% with three or more repetitive diseases. This recommends at that point that the introductory scenes essentially are gonococcal and consequent scenes include other pathogens and are likely polymicrobial in beginning. The intrauterine device (IUD) also inclines females to both gonococcal and nongonococcal PID. These gadgets are known to increment the hazard calculate three times in clients, four times in nulligravid clients, and indeed higher for women who have the IUD in put for over 5 years.

Generally, starting indications show up 3-5 days after sexual exposure to the carrier. Examinations once in a while are performed since indications are not extreme, but the mucosa of the urethral meatus and openings of pariurethral channels are red and edematous. Discharge ordinarily can be communicated from the urethra and Skenes channel. The cervix is inflammed and green or yellow purulent release exudes from the outside os. Gonorrheal endometritis is transitory and frequently recuperates suddenly without clearing out its check. In any case, the unpredictable spotty bleeding that a few women portray frequently happens auxiliary to such intense shallow disease. The living beings spread rapidly

and respectively to the endosalpinx and include the ovaries, cul de sac, and pelvic peritoneum by ethicalness of the discharge that pours from the fimbriated closes of the tubes. This produces pelvic peritonitis. Symptomatically, there is fever, sickness and spewing are not exceptional, and pain is direct to extreme and as a rule display in both quadrants of the lower abdomen. Physical examination uncovers delicacy and unbending nature in the lower guts, which may be went with by distention auxiliary to disabled illeus. On pelvic examination, prove of contamination of the outside genitalia and cervix may be show, and all inclusive inconvenience auxiliary to cervical movement frequently is famous along with delicacy in the sidelong fornices. Research facility tests can offer assistance to set up a diagnosis. The erythrocyte sedimentation rate and white blood cell tally by and large are lifted. Culdocentesis and laparoscopy are more exact demonstrative tests than endocervical societies and are demonstrated for patients with intense pelvic torment than cannot be separated from other pathologies, such as a ruptured appendix, ectopic pregnancy, septic fetus removal, and break of an ovarian sore. Without treatment indications ordinarily subside in 7-10 days and are gone in 21 days. The array of gynecologic indications depicted as remaining of gonorrhea incorporate pain, irregular uterine bleeding, and dyspareunia. Consequent contaminations will be more serious since of the anatomically mutilated pelvic structures with modified blood supply and modified capacity to react to infection.

**Presentation**

In men, the regular displaying complaint is one of urethritis and dysuria, went with by a bountiful purulent release from the penis [1]. The hatching period ranges from 2 to more than 8 days. Nongonococcal urethritis more often than not presents with a mucopurulent release; in any case, the two disorders may cover, and treatment for urethritis must be focused on at both gonococcus and chlamydia. Epididymitis is also seen in men with gonorrhea. Proctitis is ordinarily not a sequela of penile contamination in men but is procured by anoreceptive intercut, ordinarily in men who have sex with men (MSM). Clinical signs of proctitis may incorporate a mucopurulent release, tenesmus, and anorectal pain.

In women, the most common location of contamination is the cervix. In nearly 50% of women, contamination may be asymptomatic. Vaginal pruritus may be detailed and/or a mucopurulent release may be watched. In contradistinction to what is seen in men, anorectal contamination and proctitis may be seen concurrently with cervical or urethral gonorrhea. Gonococcal disease may advance to PID in a minority of cases. PID happens in 10–40% of cases in women and may be the showing sign of disease.

Oropharyngeal contamination may happen in both genders as a result of orogenital contact. Clinically, patients may be asymptomatic or may have pharyngitis. So also, gonococcal conjunctivitis may be seen in grown-ups as a result of contact with irresistible discharges. In a minority of cases, visceral spread may follow, as is seen in gonococcal joint pain and in the cutaneous signs of DGI.

Infection of infant newborn children with N. gonorrhoeae is a result of securing by entry through the birth canal of an contaminated mother. Transmission may happen from mother to child in 30–40% of pregnant mothers with cervical contamination. The most common appearance of infection in the newborn newborn child is ophthalmia neonatorum. Infant newborn children may too create dispersed illness with gonococcal joint pain, bacteremia, and meningitis.

**Culture Testing**

Culture testing is a cheap, particular demonstrative test which grants quick distinguishing proof of the bacteria and also licenses testing for antibiotic vulnerability [8]. The utilize of particular culture landscapes with the expansion of anti-microbials is suggested. Culture testing is suggested for tests which have been taken from the endocervix, urethra, rectum, and pharynx, and tests ought to be taken agreeing to the data contained in the sexual anamnesis of the young lady. The sensibility of culture testing is hoisted for tests taken from the genital range as long as collection, transport, and capacity of the test itself are appropriate.

Instant minuscule assessment with Gram, or methylene blue has great affectability (>95%), and great specificity, as a quick demonstrative test in symptomatic men with urethral emissions. Microscopy has destitute affectability (<55%) in asymptomatic men and in recognizing endocervical contaminations (<55%) or rectal contaminations (<40%). Tiny assessment cannot be prescribed as a demonstrative test in these circumstances.

Nucleic corrosive enhancement tests (NAATs) for the discovery of Neisseria gonorrhoeae have a affectability >95% compared with microbiological culture in spite of the fact that affectability shifts from one sort of NAAT to another. In the case of affirmation of diagnosis, or on failure of treatment, an antibiogram culture ought to be performed. NAAT can be utilized on endocervical swabs, vaginal swabs, urethral swabs, and urine tests. In women, NAAT affectability on urine is lower than that of NAAT performed on endocervical and vaginal swab. A single vaginal or endocervical example assessed with NAAT has a adequate sensibility (90%) when utilized as a screening test. Collection of urethral, urine, rectal, and pharyngeal examples ought to be coordinated by the anamnesis and from the individual sexual habits.

**Diagnosis**

The clinical acknowledgment of uncomplicated genital gonococcal disease can be very basic with an orderly great history, physical exam, and Gram recolor of the penile exudate [1]. Culture on chocolate agar may affirm contamination. In women, there may be no outside appearances of disease, and diagnosis might best be drawn closer utilizing nucleic acid innovation such as polymerase chain reaction (PCR). In the spread disease state, classical microbiological procedures, such as Gram recolor and culture, may be utilized as with suctioned synovial liquid from suspected gonococcal joint pain. Blood societies may moreover be valuable, as well as skin biopsy and societies of the cutaneous lesions.

## Conclusion

Gonorrhea is an acute infectious disease that manifests itself in severe burning during urination, cloudy urine, severe pain, and purulent discharge. It most often affects the urinary and genital organs. In oral sex, the infection affects the throat, and in anal sex, the anus. Gonorrhea is transmitted from one infected partner to another, and it is possible to pass it on from mother to child during childbirth.

## References

1. Bernstein, J. M. (2014.): „Gonorrhea“ in Mroczkowski, T. F.; Millikan, L. E.; Parish, L. C. (eds):: „Genital and Perianal Diseases - A Color Handbook“, CRC Press, Taylor & Francis Group, Informa Business, Boca Raton, USA, pp. 25. – 28.
2. Habif, T. P. (2016.): „Clinical Dermatology - A Color Guide to Diagnosis and Therapy, Sixth Edition“, Elsevier Inc., Philadelphia, USA, pp. 411. – 415.
3. Kollar, L.; Shmaefsky, B. R. (2005.): „Gonorrhea“, Chelsea House Publishers, Haights Cross Communications, Philadelphia, USA, pp. 45.
4. Reisner, E. G.; Reisner, H. M. (2017.): „Crowley's An Introduction To Human Disease - Pathology and Pathophysiology Correlations, Tenth Edition“, Jones & Bartlett Learning, LLC, Ascend Learning Company, Burlington, USA, pp. 233.
5. Satpathy, H. K.; Asante, A.; Goodman, M. (2012.): „Sexually Transmitted Infections“ in Sloane, P. D.; Slatt, L. M.; Ebell, M. H.; Smith, M. A.; Power, D. V.; Viera, A. J. (eds): „Essentials of Family Medicine, Sixth Edition“, Lippincott Williams & Wilkins, Wolters Kluwer Business, Baltimore, USA, pp. 388.
6. Blythe, M. J. (2009.): „Gonorrhea“ in Neinstein, L. S.; Gordon, C. M.; Katzman, D. K.; Rosen, D. S.; Woods, E. R. (eds): „Handbook of Adolescent Health Care“, Lippincott Williams & Wilkins, Wolters Kluwer Business, Philadelphia, USA, pp. 548.
7. Bolton, G. C. (1983.): „Venereal Disease in Adolescents“ in Bongiovanni, A. M. (ed): „Adolescent Gynecology - A Guide for Clinicians“, Plenum Publishing Corporation, New York, USA, pp. 149. – 150.
8. Di Paolo, G. (2018.): „Sexually Transmitted Diseases 14 in Adolescence“ in Fulghesu, A. M. (ed): „Good Practice in Pediatric and Adolescent Gynecology“, Springer International Publishing AG, Cham, Switzerland, pp. 219.