A discussion on gonorrhoea

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Abstract.
Gonorrhoea, a sexually transmitted disease (STD) caused by bacterium Neisseria gonorrhoea. It’s also sometimes called “the clap” or “drip.” It is the second most common STI and commonly co-occurs with other STIs (especially chlamydia trachomatis). It mostly affects the genital tract and genital area, also if the organism comes in contact with mucous membrane this can lead to infection, such as infections in lower urogenital tract, pharynx, anus/rectum, conjunctiva (eyes). Gonorrhoea is spread through sexual fluids, including vaginal fluid and semen. Often, gonorrhoea doesn’t cause symptoms, especially in people assigned female at birth. When present, symptoms differ. It could lead to long-term health problems and infertility, but antibiotics can cure it and reduce the chance of complications.

Keywords:
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tenesmus
Background

Sexually active people of any age or sex can get gonorrhoea and spread it to their partners. You can pass the infection on to your baby during childbirth. You get an infection when the bacteria that causes gonorrhoea (N. gonorrhoeae) enters your body through sexual fluids, like semen or vaginal fluid - often through unprotected sex. The bacteria can enter your body through sexual contact (vaginal sex, anal sex or oral sex) and through vertical contact (childbirth). The main risk factors are unprotected sexual activities, multiple sex partners, male homosexuality, previous STD, illicit drug use, etc. The diagnosis is based on the history and physical examination and Your urine or body fluid will need to be tested for the bacteria that causes gonorrhoea. During the diagnosis the physician will perform a pelvic exam, or urine sample, or swab the throat or rectum to take a fluid sample. Physicians can’t treat gonorrhoea with over-the-counter or home remedies. Antibiotics are the primary treatment for gonorrhoea, your sexual partner(s) from the last 60 days will need treatment too. The CDC currently recommends a shot of ceftriaxone. After getting the antibiotic, you can still spread the infection to others for up to seven days. So avoid sexual activity for at least seven days. So first the bacteria uses their pili to adhere to epithelial cells of the host. They also use opa proteins for adherence. Then it invades and enters into the epithelial cells of the host. So the bacteria may use the complement receptors type 3 (CR3) of the host cell as a potential gateway. Then the host immune system will bring immune cells and eventually there can be purulence, so pus there can be slooting off of these cells and this will lead to the signs and symptoms. You may not always notice any symptoms if you have gonorrhoea. But even if you’re an asymptomatic carrier - which means you have no symptoms - you can still transmit gonorrhoea. Symptoms of gonorrhoea usually develop within about 2 weeks of being infected, although they sometimes do not appear until many months later. About 1 in 10 infected men and 5 in 10 infected women will not experience any obvious symptoms, which means the condition can go untreated for some time. Symptoms differ in both males and females. When symptoms
are present in male they may include urethritis – dysuria, urethral discharge(profuse purulent urethral discharge) – serous at first, 3 days later discharge increases in volume and becomes more purulence, some patient even can experience acute-epididymo-orchitis (unilateral scrotal pain). Female symptoms include urethritis – dysuria, vaginitis and cervicitis – dyspareunia, abnormal uterine bleeding (inter-menstrual, post-menopausal bleeding). Vaginal bleeding is the most common initial symptom and it is purulent, thin may be odorous. Also if the bacteria can travel up to the fallopian tube, there is a connection between stomach and fallopian tube so this will lead to pelvic inflammatory disease so as for this there will be abdominal pain (especially RLQ pain), pelvic pain, fever, nausea/vomiting. There’s also some other gonorrheal conditions and findings, such as rectal gonorrhoea, ophthalmia neonatorum. Rectal gonorrhoea is the rectal infection that gets through male - male sexual contact. Symptoms include purities, rectal pain, tenesmus. Ophthalmia neonatorum is an infection that occurs in neonates through vertical transmission during childbirth. So during childbirth if there’s any microorganism in the vaginal cavity those can infect the conjunctiva of infants and this will lead to bilateral conjunctivitis (red eyes, sore/burning eyes, purulent discharge, eye crusting). Untreated gonorrhoea can lead to several major complications, such as: infertility in men, infertility in women, infection that spreads to the joints and other areas of the body, increased risk of HIV/AIDS, complications in babies. To lower the risk of getting gonorrhoea: should use a condom, limit the number of sexual partners, be sure to get tested for STDs, avoid sex with someone who appears to have STDs, and regular gonorrhoea screening.

Methods
You may develop noticeable symptoms of gonorrhoea within 2 to 30 days after exposure. That said, it may take several weeks for symptoms to appear. Burning or pain during urination may be the first symptom you notice. Often a urine test or by testing a sample of fluid or blood test can detect gonorrhoea. We will also do cervical examination and Nucleic Acid Amplification Test (NAAT) done on first void urine to confirm
the diagnosis. The treatment helps eliminate the bacteria, relieving symptoms and preventing further complications. However, antibiotic resistance has become a concern with gonorrhoea. It's crucial to complete the prescribed antibiotic course as directed by a healthcare professional to ensure the infection is fully treated. Regular testing and follow-up are also important to monitor treatment success and address any potential complications. If you suspect you have gonorrhoea or have been exposed to it, it's essential to consult with a healthcare provider for appropriate testing and treatment.

Results
As a result, we know that gonorrhoea can be treated completely, and the treatment of choice is CDC criteria 2021 which is basically inj. Ceftriaxone IM stat <150 kg : 500mg, >150kg : 1g with oral doxycycline 100mg, BD for 7 days. But as we all know nowadays most of the causative organisms acquired an antibiotic resistance, this lead to the treatment to fail. Gonorrhoea may have a negative impact on sexual health, care coordination by different specialists needed for patients with gonorrhoea.

Discussion
Gonorrhoea is a commonly seen STD with severe complications if it’s left untreated. There are several online forums and groups dedicated to sexual health and STIs, such as: If you're seeking support or information regarding gonorrhoea, consider exploring online forums and groups dedicated to sexual health and STIs. Some platforms where you might find relevant discussions include: 1. STD Testing and Support Community (Reddit) - Subreddit: r/STD - Link: [STD Subreddit] (https://www.reddit.com/r/STD/), 2. American Sexual Health Association (ASHA) Community - Website: [ASHA Community] (https://www.ashahad.org/), 3. Planned Parenthood Community - Website: [Planned Parenthood Community] (https://community.plannedparenthood.org/), 4. MedHelp - Sexual Health Community - Website: [MedHelp - Sexual Health Community] (https://www.medhelp.org/forums/show/116). People with gonorrhoea have things like anger, low self esteem, feelings of hopelessness, isolation, depression, increased psychological distress and decreased quality of life.
Psychological counselling is very much needed for patients with gonorrhoea.

**Conclusion**

To sum everything that has been documented so far, the study of gonorrhoea is more important, not because it's a STD, but it may help many people overcome the feeling of self rejection and self denial from society. Understanding gonorrhoea leads to having a brief idea about how gonorrhoea, it made us understand how to prevent STDs. It also helped us to learn the causes, aetiological factors, signs and symptoms, diagnosis, treatment and the factors that could help us prevent the occurrence and recurrence of the skin condition. So, as the saying goes “An ounce of prevention is worth a pound of cure”.

**References:**