Rectal gonorrhoea in women: true infections?

We read with interest an Article published in *The Lancet Microbe* by Maartje Visser and colleagues,[1] who reported that among women with *Neisseria gonorrhoeae*, more than 70% had anorectal gonorrhoea infection. Most of those women had concurrent urogenital and anorectal gonorrhoea diagnoses, and anorectal infection alone occurred in 17·4% of them. The findings were similar between women who did and did not report anal sex.[1] Currently, nucleic acid amplification tests (NAATs) are the preferred method for diagnosing gonorrhoea. However, such tests cannot discriminate between nucleic acids originating from viable bacteria and those originating from non-viable bacteria. Therefore, a key question is whether rectal gonorrhoea detected through NAATs represents true infections with viable bacteria. This question is even more relevant in asymptomatic women. Viability PCR, which detects only viable bacteria in clinical specimens, could be used as a suitable approach to address the limitations of NAATs.[2] When performed on *Chlamydia trachomatis* NAAT-positive anorectal specimens, viability PCR revealed that only 52·2% of the specimens tested contained viable bacteria.[3] Viability PCR can play an essential role in identifying a true infection, and thus, such a tool needs to be developed for *N gonorrhoeae*. The presence of non-viable gonorrhoea will not affect clinical outcome or transmission. Further research on the clinical relevance of anorectal gonorrhoea, the role of extragenital gonorrhoea in morbidity and transmission, and the possibility of autoinoculation from the rectum to the vagina should focus only on women with viable *N gonorrhoeae* in the rectum. Findings from such studies will allow us to carefully evaluate the cost-effectiveness of rectal screening for women.

Furthermore, new routine diagnostic tests should be developed to detect only viable *N gonorrhoeae*. These diagnostic innovations will serve as important tools for clinical practice, especially in asymptomatic individuals, to treat only true infections. This situation will have a major effect on antibiotic consumption, as first-line treatment of gonorrhoea relies on high-dose, broad-spectrum antibiotics (ceftriaxone 1 g in a single dose) and will restrict the selection pressure of antibiotics to gonococci and bacterial flora.[4] This factor is all the more important given that the incidence of gonorrhoea has increased substantially since 2022 and the ceftriaxone-resistant and multidrug-resistant FC428 clone is spreading across countries.[4] In Europe, a sharp increase in gonorrhoea cases has recently been reported in young people, particularly women aged 20–24 years.[5]

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