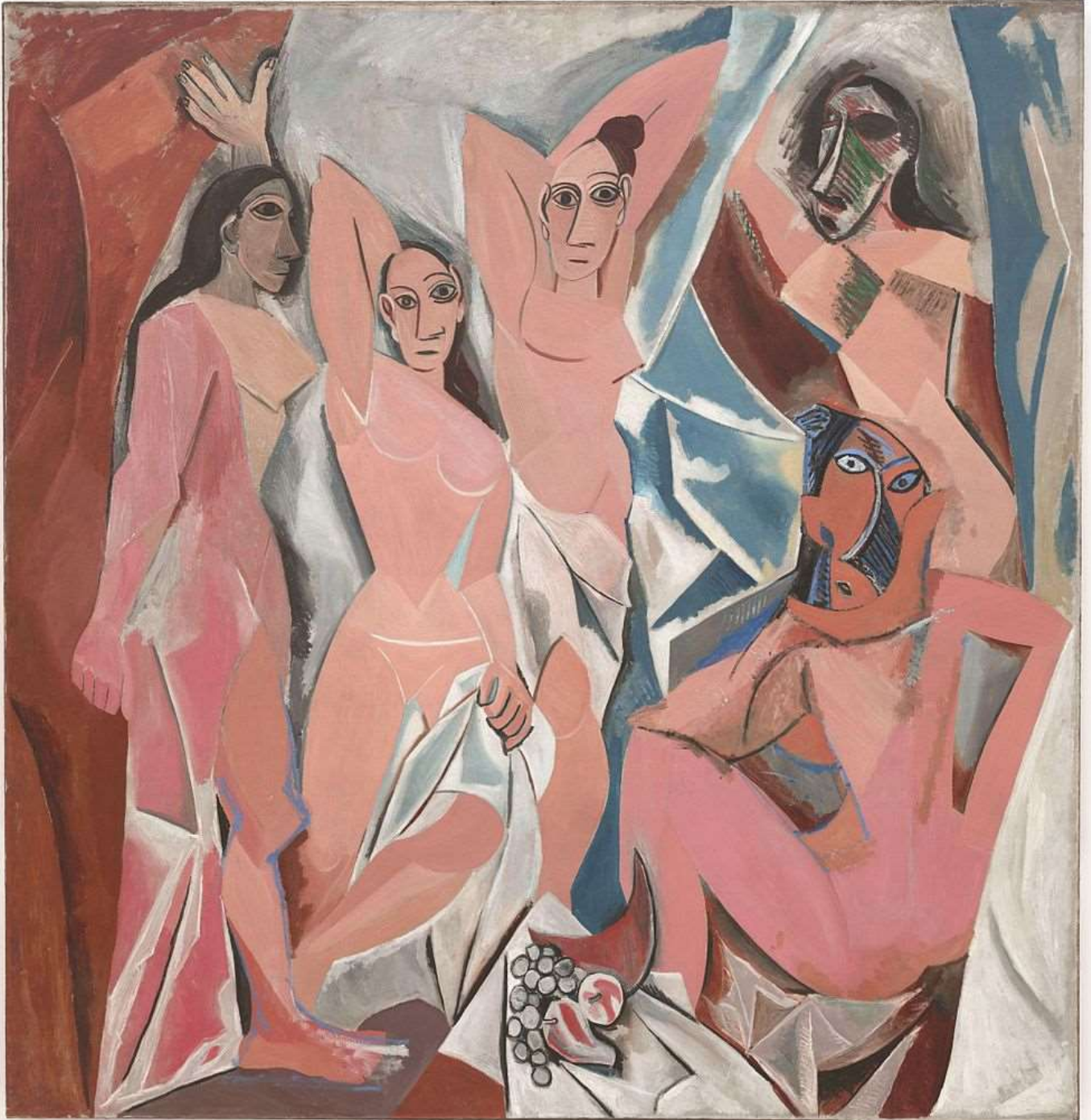


**CHLAMYDIAL GENITAL INFECTION**



*“Les Femmes d'Alger (O.K.)”, oil on canvas 1912 Pablo Picasso, Museum of Modern Art, New York City*

*“The primitivism evoked in these masks, moved me to liberate an utterly original artistic style of compelling, even savage force”*

*Pablo Picasso*

*Pablo Picasso’s “Les Femmes d’Alger (O. J.)” (The Young Ladies of Avignon) has been called one of the most important paintings of the Twentieth century. It is important on a number of different levels, but it is as an evolutionary piece it holds a priceless value. As a critical missing link fossil is to the Paleontologist, so is Picasso’s “Les Femmes d’Alger” to the historian of Art. It is a fascinating early link in the evolution of Twentieth century abstractionist Art. Like an important fossil it retains many vestiges of a past world, but at the same time contains the first primal undifferentiated hidden hints of a spectacular and greatly diversified future state. The work portrays five nude female prostitutes from a brothel which Picasso visited as a young man in Barcelona. It retains the rose coloured vestige of his “Pink Period”, from which he had just emerged, and the faces of the figures show the influence of primitivism, then very popular. Primitivism was a new-found fascination with Art from ancient cultures, in particular Iberian and North African. The three figures on the left show facial features in an Iberian style of Picasso’s native Spain, while the two on the right show those of the primitive African mask-like style, a style that would later be most fully developed by Amedeo Modigliani. This primitivism, was one of the first inspirations for abandoning traditional perspective. The figures have a flatness, and almost child-like naivety, a regression back to the pre-Renaissance. But there is also astonishing innovation. Les Femmes d’Alger, is widely regarded among Art historians as a proto-cubist work, a genre that Braque and Picasso himself would develop in the last decade of the Belle Epoch, just before the outbreak of the First World War.*

*The adaptation of primitivism and the abandonment of perspective in favor of a flat, two-dimensional visual plane, was a revolutionary and shocking departure from traditional Art, so shocking that initially even the Fauvists, including Matisse, found it simply too much! Rather than sticking to a mathematically rigid method of constructing perspective, Picasso was beginning to try and represent all perspectives at one and the very same time, an ideology from which Cubism would eventually emerge and so from an initial deconstruction of traditional perspective a new multidimensional vision would be reconstructed and from this in turn, modern Twentieth century abstraction would eventually emerge. Of course Les Femmes d’Alger was also no less shocking for the subject matter it so graphically portrayed! When it was first publically displayed it had to have its name changed from its original, “The Brothel of Avignon”, for the sake of public decency. The figures are depicted in an overtly sexually aggressive even confronting manner - none appear conventionally feminine. Their bizarre and distorted shapes seem frankly menacing - perhaps reflecting a rather high anxiety level experienced by a young Picasso when he visited the brothel.*

*Hidden within “Les Femmes d’Alger” was the future of Twentieth century Art. Young Pablo’s anxiety is clear to see from the work. Indeed his anxiety would have been heightened yet further had he known of the possibility of chlamydial infection - an infection that could convey some hidden consequences of its own of a rather more personal nature!*

## CHLAMYDIAL GENITAL INFECTION

### Introduction

**Non Specific Urethritis (NSU)** is an ill defined but still commonly used term.

Its most common usage relates to a **sexually acquired non-gonococcal urethritis**.

A number of organisms may be involved including:<sup>2</sup>

1. **Chlamydia trachomatis:**

**This is the most important consideration because of its potential to cause PID in women with its attendant long term complications.**

*but a similar clinical picture may be seen with:*

2. Mycoplasma genitalium

3. Ureaplasma urealyticum

4. Herpes simplex

5. Trichomonas vaginalis

This document relates to **Chlamydial trachomatis** genital infection.

**As of 2015 chlamydia infection is now the most common form of sexually transmitted disease in Australia.**

Gonorrhoea should always be considered in the differential diagnosis (*and may coexist with chlamydia*) and ruled out by investigation as well as treated empirically.

**Chlamydia is frequently asymptomatic, especially in women, though it is important to recognize as it can lead to chronic PID and ultimately to infertility.**

### Epidemiology

As of 2015 chlamydia infection is now the most common form of sexually transmitted disease in Australia.

### Pathology

#### Organism

- Chlamydial trachomatis, serogroups D - K

Note that certain **strains** of *Chlamydia trachomatis* are the cause of LGV. The strains are the serovars L1, L2 and L3

### Complications

Complications can include:

1. PID
2. Chronic pelvic pain.
3. Infertility.
4. Ectopic pregnancy.
5. Infections during pregnancy may cause preterm rupture of the membranes and preterm delivery.
6. Infection of the newborn:
  - Conjunctivitis
  - Pneumonitis
- 7 Endocervical *C. trachomatis* infection has also been associated with an increased risk of acquiring human immunodeficiency virus (HIV) infection and may also increase HIV infectiousness.

### Reservoir

- Humans.

### Transmission

- Transmission of *C. trachomatis* occurs primarily by sexual contact.
- Mother to baby transmission occurs when mothers colonised with *C. trachomatis* infect their babies as they are born vaginally and can lead to neonatal conjunctivitis and pneumonitis.
- A high proportion of infections in women are asymptomatic resulting in untreated disease, ongoing transmission and an increased risk of sequelae.

### Incubation Period

- The incubation period is poorly defined but is thought to be 7 - 14 days or longer.

### Period of Communicability

- The period of communicability is unknown but may be months to years.

### Susceptibility and Resistance

- Everyone is susceptible to infection.
- While the spontaneous cure rate has been estimated at 7.4%, immunity following infection is thought to be type specific and only partially protective. As a result recurrent infections are common.

### Clinical Features

#### 1. Females:

- Most women with urethral or endocervical chlamydial infection are asymptomatic.

*Clinical manifestations may include:*

- Vaginal discharge.
- Dysuria.
- Post-coital or intermenstrual bleeding.
- PID

*Less frequent manifestations include:*

- Bartholinitis.
- Perihepatitis
- Proctitis.

#### 2. Males:

- Infection may be asymptomatic.
- The primary presentation of Chlamydial infection in males is urethritis

*Possible sequelae and complications of male infection include:*

- Epididymitis.
- Infertility, (rarely).

- Reiter's syndrome.
- Chlamydial proctitis in homosexuals.

### Investigations

1. Swabs can be taken from:

- Urethra.
- Cervix.

Samples should then be sent to the laboratory in an appropriate transport medium.

2. NAAT/ PCR testing:

- Nucleic acid amplification testing (NAAT) for chlamydia using PCR or strand displacement assay is highly sensitive and specific for *C. trachomatis*.
- However, false positive results are possible and should be considered in low risk individuals where a positive result was unexpected.
- Nucleic acid testing can be performed on **cervical** and **urethral swabs** and **first void urine**.<sup>4</sup>
- In women, PCR testing of urine is less sensitive than PCR testing on endocervical swab specimens.
- In cases diagnosed by PCR, further swab specimens should be obtained if possible for culture to allow monitoring of antibiotic resistance.

**Amplicor:**<sup>3</sup>

- The **Amplicor test** is a PCR testing kit that can detect both *N. gonorrhoeae* and *Chlamydia trachomatis* in a variety of specimens. Urine is most commonly tested specimen with Amplicor.

3. Co-infection with gonorrhoea sometimes occurs:

- Particularly in imported cases. Screening for *N. gonorrhoeae* should also be considered when testing for *C. trachomatis*.

### Management

For the treatment of uncomplicated chlamydial genital infection in men and women, use:  
2,4

- **Azithromycin 1 gram orally single dose**

*Or*

- **Doxycycline 100 mg orally twice daily for 7 days**

**Complicated infections such as PID, or rectal disease or epididymo-orchitis will require more prolonged doxycycline treatment (14-21 days)**

**See latest Antibiotic Guidelines for full prescribing details.**

If symptoms persist or recur, a second course of antibiotics, further investigation of the aetiology, and assessment of risk of re-infection are required.

Sexual partners of individuals with chlamydial infection should be examined and investigated then treated empirically.

### *Notification*

Victorian statutory requirement. Chlamydia (Group C disease) must be notified in writing within five days of diagnosis.

Medical practitioners have a statutory obligation under the *Children and Young Person's Act 1989* to notify the Department of Human Services' Child Protection Service if they believe a child is in need of protection on the basis of sexual abuse.

## References

1. Chlamydial Genital Infection in: The Blue Book Website
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  - Antibiotic Therapeutic Guidelines, 15<sup>th</sup> ed 2014.
3. Leslie DE et al. An assessment of the Roche Amplicor® *Chlamydia trachomatis/Neisseria gonorrhoeae* multiplex PCR assay in routine diagnostic use on a variety of specimen types. *Commun Dis Intell* 2003; 27:373–379.
4. Chlamydia in Melbourne Sexual Health Clinic (MSHC) Clinical Guideline, November 2014.

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