

## CHLAMYDIA TRACHOMATIS INFECTION IN A SOUTH INDIAN POPULATION - A PROSPECTIVE PILOT STUDY

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### SUMMARY

A prospective pilot study was carried out in forty one consecutive women attending gynaecology outpatients for the presence or absence of endocervical chlamydia trachomatis infection by using immunological fluorescence method. Four of the patients showed evidence of the infection. There was no typical feature of the infection observed apart from a vague forniceal tenderness.

### INTRODUCTION

Chlamydia trachomatis infection has been called the "disease of the 80's". Infection due to this organism has also been found to be the leading cause of infertility in the United States. It is now well established that chlamydia trachomatis is sexually transmitted and causes a variety of gynaecological problems. However, there is not enough study in the Indian women. This is partly because of the lack of awareness of the problem and partly due to paucity of special laboratory support necessary for the diagnosis of chlamydia trachomatis infection.

### MATERIAL AND METHODS

Forty one consecutive patients attending the gynaecology outpatients of M. S. Ramaiah Medical College Hospital, Bangalore, were recruited in the study. The details of each patient were entered in predesigned printed protocol.

Swabs for gonococci were taken from the rectum and endocervix and gram stain was performed.

The chlamydial infections were studied using "MICRO TRACK" Kit (U.S.A.). The swab for chlamydia was taken with silverarginate stick (Calgiswab, Illinois, U.S.A.) by vigorously rotating the stick in the endocervix to dislodge some endocervical cells. The cells were transferred to the marked well on the micro-track slide and immediately fixed with the fixative provided in the kit.

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The slides were then stained with the direct specimen reagent containing fluorescein-labeled monoclonal antibodies and counterstained. The antibody bound specifically to any chlamydia trachomatis present in the specimen. The Chlamydia-positive specimen exhibited apple-green elementary or reticulate bodies when viewed under a fluorescent microscope.

None of the cases showed presence of gonococci. Four of the forty one cases (9.75%) had Chlamydial infection. The age range of the patients was 15 to 33 years. The mean age of the Chlamydia - positive cases was 19.75 years compared to 20.75 years in the Chlamydia - negative group. All cases who were Chlamydia positive were nulliparous but married except one who was unmarried. No history of promiscuity could be elicited in any of the cases. Three of the four positive cases were housewives and one was self employed.

None of the positive cases was using any form of contraception.

One of the 4 positive cases had abdominal pain, the remaining 3 had no symptom at all. In all of the positive cases there was vague forniceal tenderness but no pelvic mass.

#### CONCLUSION

Our study indicates that Chlamydial infection is a reality too in our women. 9.75% incidence is quite high and compares well with studies in our countries of the orient (Chaudhuri and Singh 1985).

The fact that none of the cases studied had gonococcal infection signifies an important shift in the distribution of sexually transmitted disease in women, from gonococcal PID in

post world war II era to Chlamydia PID in the recent time (Schachter, 1978).

Apart from PID, Chlamydia trachomatis has been known to cause infertility due to tubal blockage, acute urethral syndrome, Bartholinitis, puerperal endometritis and perihepatitis with salpingitis (Fitz - Hume - Curtis syndrome).

Since chlamydiae can only be grown in the live cells, tissue culture media has to be used for their culture. Alternatively, they can be diagnosed by using fluorescein labeled antibodies and recently by enzyme assays. All these methods are expensive.

Considering that a significant proportion of our population may contract Chlamydial infection, the awareness of the problem amongst the practising gynaecologists is important. Lack of laboratory support in absence of any well defined clinical picture obviously puts the specialist in a tight spot. It is recommended therefore, that in suspected cases it is justified to treat these patients empirically and effectively with tetracycline or erythromycin (Bowie et al 1982).

It is, however, the tip of the iceberg. There is an urgent need for multicentric study with funding from scientific agencies to identify the magnitude of the problem in our country. Only then, there is any hope of averting a possible epidemic of Chlamydial infection by vertical and horizontal transmission.

#### REFERENCES

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