

# The role of antibiotics after dilatation and curettage in women with metrorrhagia in the prevention of pelvic inflammatory disease

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## Summary

A follow-up study was carried out in 67 healthy women with negative vaginal-cervical cultures after an endometrial curettage for metrorrhagia. The women were separated into two treatment groups and clinically followed for one month after the operation. The first group included 33 women (aged 23-67, mean 43) who received doxycyclin 200 mg daily for a period of one week after the procedure. The second group included 34 women (aged 28-70, mean 43.5) who did not receive any antibiotic regimen after the dilatation and curettage. Four and three women from the 1st and 2nd group, respectively, developed PID during follow-up; a difference not statistically significant.

*Key words:* Metrorrhagia; Curettage; Antibiotics; PID.

## Introduction

A previous study showed that the use of antibiotic prophylaxis in women without a history of pelvic inflammatory disease (PID) does not significantly reduce the incidence of postabortal pelvic infection [1].

The purpose of the present study was to investigate the usefulness of antibiotic prophylaxis after an endometrial curettage in preventing PID diagnosed not only on general clinical and laboratory data but on diagnostic criteria outlined by the Center of Disease Control (CDC), improving the accuracy of the diagnosis and the appropriateness of treatment.

## Materials and Methods

A follow-up study was carried out in 67 healthy women after endometrial curettage for metrorrhagia who were either given antibiotics or not. Women were included in the study only if they had a negative vaginal cervical culture in the week before the operation. As PID related to endometrial curettage was characterized only if it happened in the first month after the procedure, all three following criteria should have been present for clinical diagnosis of PID.

1. Lower abdominal tenderness
2. Cervical motion tenderness
3. Adnexal tenderness [2].

Additional criteria supporting or confirming the presence of PID included oral temperature  $>38.3$ , abnormal cervical or vaginal discharge, elevated sedimentation rate and/or C-reactive protein, laboratory documentation of cervical infection with *N. gonorrhoea* or *C. trachomatis*, tubo-ovarian abscess on sonography or other imaging study, PID findings on laparoscopy and histopathologic evidence of endometritis.

The women were separated into two treatment groups and clinically followed for one month after the operation. The first

group included 33 women (aged 23-67, mean 43) who received doxycyclin, 200 mg daily for a period of one week after the procedure. The second group included 34 women (aged 28-70, mean 43.5) who did not receive any antibiotic regimen after the dilatation and curettage. No woman received methylergometrine after the procedure since this regimen is solely indicated for the prevention of haemorrhage after an abortion.

## Results

First group: Four women developed PID during the one-month follow-up. Second group: Three women developed PID during the same period. The difference was not statistically significant between the groups. Laboratory documentation of cervical infection with *N. gonorrhoea* and *C. trachomatis* was confirmed in one woman in the first group and one woman in the second one. Tubo-ovarian abscess on sonography was revealed in one woman in the second group which was confirmed in CT. PID findings on laparoscopy were revealed in one woman in the first group and histopathologic evidence of endometritis in one woman in the same group after a new D & C when metrorrhagia did not cease after the first operation.

## Discussion

There has been a rise in the incidence of PID in the past years due to a number of factors, including increasing incidence of sexually transmitted pathogens such as *C. trachomatis*. A very important factor in diagnosing women with pelvic inflammatory disease is clinical awareness by the gynecologist.

These infections are polymicrobial and cultures for aerobic and anaerobic organisms are necessary for microbiologic identification, although a discrepancy has been

shown between the microbiological isolation from the vagina/endocervix and from the salpinx [3], and empiric antimicrobial drug administration is almost the rule.

According to the results of our study the use of prophylactic antibiotics in healthy women without a history of PID and negative vaginal-cervical cultures does not significantly reduce the incidence of post-curettage pelvic infection. Further studies, probably multifactorial, with larger series are needed for final conclusions.

### Conclusion

It seems that there is no need for antibiotic prophylaxis in women with negative vaginal-cervical cultures after curettage for metrorrhagia.

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