

(A CASE REPORT)

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# Failure of Oral Contraceptive with Rifampicin

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## SUMMARY

A case of failure of oral contraceptive pills in a woman receiving rifampicin has been reported and discussed.

## INTRODUCTION

Rifampicin is one of the major anti-tubercular drugs used these days. Reimers and Jezek (1974) found an increased incidence of break through bleeding in women taking oral contraceptives who were also taking rifampicin for treatment of tuberculosis. The first report of contraceptive failure in women taking other drugs with their oral contraceptives appeared in 1971 (British Medical Journal 1980). Since then at least 17 pregnancies have been recorded in users of contraceptive steroid given rifampicin (Breckenridge et al 1979).

## CASE HISTORY

M.A. 29 years female was on oral contraceptive pills (Gynovlar 21, contains Norethiosterone acetate 3 mg and Ethinyl oestradiol 0.05 mg in each pill) since August 1978. She was getting normal menstrual period after each course of oral contraceptive pills. In September, 1979 she suffered from pulmonary tuberculosis, for which she was started on Rifampicin 600 mg and Isoniazid 300 mg daily. Along with anti-tubercular drugs she continued taking oral contraceptive pills. In December 1979 she missed her menstrual period inspite of continuing oral contraceptive pills. Pregnancy was suspected for which she was referred to an obstetrician and it was confirmed.

## DISCUSSION

In the present case rifampicin resulted in failure of oral contraceptive pills. Reimers and Jezek (1974)

have reported 5 pregnancies occurred among 88 women on oral contraceptive pills when receiving rifampicin for tuberculosis treatment, while 68 had menstrual cycle disorder. He attributed pregnancy due to rapid breakdown of oestrogen by rifampicin. Till now 17 pregnancies have been reported in users of contraceptive steroid given rifampicin (Breckenridge et al 1979). In relation to oral contraceptive (Bolt et al 1975 and 1977) rifampicin accelerated the elimination of radio-active ethinyloestradiol from plasma. This accelerated elimination was due to a more rapid rate of hydroxylation of ethinyloestradiol in the liver. Rifampicin also diminishes the plasma concentration of the progestogen as well as the oestrogen component of the contraceptive preparation. In conclusion, the oral contraceptives should not be given to a woman being treated with rifampicin, and that alternative methods should be used.

## ACKNOWLEDGEMENT

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