# The Antigon-F, a superior intrauterine contraceptive device

*F. Fuchs and A. Risk**

The Antigon intrauterine contraceptive device was first described by Lebech and Osler in Denmark in 1967 under the name of polygon. It is a closed device of kite shape, made of polyethylene, with a small magnet imbedded in one of the long sides. It is easily compressed from side to side to accommodate it in the inserter but it will tend to regain its shape as soon as released from the inserter. The inserter is about 10 mm wide with a collar at the proximal end. This end is pressed firmly against the cervix at insertion but it should *not* be introduced into the cervical canal. The protruding end of the device itself is inserted into the cervical canal and pushed through with the plunger. Insertion is done with great ease and this is one of the most advantageous features of the device.

In spite of the minimal risk of a perforation, a modification of the Antigon became necessary when an advisory committee of the U.S. Food and Drug Administration issued a warning against 'closed' or ring-shaped devices. An inquiry had revealed a substantial number of cases of intestinal obstruction after uterine perforation of various other closed devices (Scott, 1968). The Antigon was modified by adding a thin membrane covering the area enclosed by the polygon. Four small slits in the membrane permit compression of the device from side to side. The modified device is called the Antigon-F.

## RESULTS

The Antigon-F has been subject to a trial involving 1480 insertions at the Family Planning Clinic of The New York Hospital-Cornell Medical Center and at the Qualicap Health Center, a satellite clinic in Queens, New York from June, 1969 until December 31, 1970 (Fuchs and Risk, 1972). The results in regard to pregnancy rate are better than those obtained with the previous generation of IUD's and also better than with the original Antigon. Less satisfactory is the expulsion rate, but the reason for this is undoubtedly an error committed by the Nursing Staff in handling the Antigon-F before insertion. The device is individually packed with the inserter in a plastic envelope.

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Before opening the envelope, the device is fitted into the inserter so that the sterile device does not have to be touched after removal from the envelope. To save time in the busy clinic the nurses, unknown to the medical staff, inserted the device into the introducer in advance, often weeks or months before use. This, of course, affects the 'memory' of the device; it will not expand in the uterine cavity as readily as if it has been compressed only for a couple of minutes during insertion. This illustrates how important it is to instruct the personnel in family planning clinics about procedures which to the medical staff appear totally obvious.

The material includes a small number (26) of nulliparous women. The Antigon-F is not ideal for the patient who has never been pregnant; the expulsion rate and the removal rate for this group (which has not been excluded from the tabulation) are higher than for the material as a whole. The material also includes insertions in the post-partum and post-abortum period, but these groups are not yet large enough for separate evaluation.

At the 12-months follow-up the material comprised 8,093 woman-months of use; the pregnancy rate per 1,200 woman-months was 1.8, the expulsion rate 16.9 first expulsions and 2.8 later expulsions. The continuation rate was 71.8.

## REFERENCES

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