FOREIGN BODY IN THE RECTUM (Grafenberg Ring.)

by

RAMESHCHANDRA C. SHAH,* M.S. (Bom.),

JYOTI A. PARIKH,** M.D. (Bom.)

and

VASANT K. VANI,*** F.R.C.S.

Crossen et al (1944) observe that foreign bodies may reach the rectum by a variety of routes, viz: swallowing, insertion and migration from adjacent organs. The reasons for the insertion of such foreign bodies are quite often obscure as observed by Lockhart-Mummery (1934). Sometimes they are inserted for the relief of pruritus, control of rectal prolapse, satisfaction of perverted sexual feelings, etc. The unusual feature of the case presented here has been the migration of Grafenberg ring, used as an intrauterine contraceptive device, into the rectum and behaving as a foreign body.

CASE REPORT

P. S. a Hindu female, aged about 23 years, was admitted to the Department of Surgery of the Gulabbai General Hospital on 6th May 1966, with the chief complaint of having had a wire removed from the rectum by the family physician. He, however, felt that the removal of the wire was incomplete. She did not give any history of insertion of the foreign body in the rectum. She had a Grafenberg ring inserted about one and a half years ago as a contraceptive device. In spite of this, six months later she conceived, later resulting in incomplete abortion after 2 months of amenorrhea, for which curetting had to be done. Obstetric history: She had 2 F.T.N.D., the last one being two and a half years ago.

Physical examination:—She was fairly built and fairly nourished. Temperature—98.4°F, pulse—80 per minute, respirations—20 per minute. No glands were palpable. Respiratory and cardiovascular systems and abdomen were normal. Rectal examination revealed the presence of a wire about 3 inches above the anal margin. On vaginal examination, the uterus was bulky and about one and a half months' size.

Investigations:—Plain x-ray of the abdomen revealed the presence of the Grafenberg ring, partially uncoiled in the pelvis. (Fig. 1).

At laparotomy, on 12th May 1966, under spinal anaesthesia, the ring was found to be buried in the recto-sigmoid region. The uterus was completely free and there were no adhesions anywhere. The uncoiled ring was removed by incising the wall of the sigmoid colon. The incision was closed in two layers. The abdomen was closed without a drain.

Post-operative course was smooth except for minor wound infection. The patient went home on the fifteenth day with the wound completely healed.

Discussion

A variety of means are available today for conception control, varying

*Hon. Consulting Surgeon.
**Hon. Consulting Gynecologist.
***Hon. Consulting Surgeon.
Departments of Surgery & Gynecology, Gulabbai General Hospital, Ahmedabad 1.
Received for publication on 21-12-66.

from the oral contraceptive pill, to the Grafenberg ring and its various modifications, as described by Hall et al (1964), Adatia et al (1964) and Bernberg et al (1964). At one time the Grafenberg ring had fallen into disuse, as a result of adverse reports related more to factors other than the ring itself. But recent studies by Oppenheimer (1959) have shown that these dangers had been over-emphasised, and in well selected and properly managed cases, the dangers were minimal in relation to the benefits gained from it. Similar favourable reports have come from Anklesaria et al (1964) and Adatia et al (1964), in their retrospective studies of the complications of such devices. One of the complications mentioned by both the above authors is the slipping out of the ring without the patient knowing of it. It is either lost or found to be lying in the vagina itself at the time of the second examination. No mention is, however, made of the migration of the ring into the abdomen. Munshi (1966) had an occasion to remove a Grafenberg ring from the broad ligament, while Thakore (1966) had to remove the plastic loop (I.U.C.D.) encased in the omentum in 2 cases from the abdomen. Perforation of the uterus during the insertion of a Grafenberg ring is extremely rare, the only case on record being that by Murphy (1933). De-Forest (1953) mentions that a stem pessary may perforate the uterus thus opening up the path for infection leading to pelvic cellulitis and even abortion. It is the practice among the women in Lagos to insert beans in the cervical canal every month. (Foreign letters: Elusive beans, J.A.M.A. 1956. Vol. *160*, p. 1353). On one occasion such a bean had migrated to the abdomen and was recovered from the peritoneal cavity at a laparotomy for an ectopic pregnancy.

Foreign bodies have been known to travel beyond the point of entry and found later in an entirely different tissue, to cause symptoms related to the new tissue. Jalundhwala (1962) reported a case where a guide wire broken during a Smith-Peterson nailing operation had travelled to the urinary bladder in approximately three months, causing symptoms of cystitis. Such movements can best be explained by muscular activity pushing the foreign body along. In the present case, the Grafenberg ring had travelled from the uterus to the rectum, and then presented into its lumen causing discomfort.

In the present case two explanations are possible for the movement of the ring. It might have been pushed along the fallopian tube at the time of curettage done six months after the insertion of the ring. Alternatively, the ring may have been pushed into the uterine wall from where it may have travelled by muscular activity to get lodged in the rectum.

The presentation of the patient with a wire protruding from the rectum is rather unusual. The treatment must be removal by laparotomy, because of its peculiar configuration, and the position of the ring in relation to the rectal wall, since there always will be the danger of laceration of the rectal wall if an attempt at its removal is made via a sigmoidoscope.

Summary

A case of Grafenberg ring embedded in the rectal wall is presented. The possible explanation of the movement of the ring from the uterus to the rectum is postulated.

Acknowledgements

Our thanks are due to the Superintendent of the hospital for permission to use the hospital records. Our thanks are also due to Dr. J. M. Jalundhwala for helpful suggestions in the preparation of this paper.

References

1. Adatia, M. D. and Raval, S. P.: J. Obst. & Gynec. India **14**: 613, 1964.
2. Anklesaria, S. B. and Anklesaria, D. S.: J. Obst. & Gynec. India **14**: 157, 1964.
3. Burnberg, C. H. and Burnhill, M. S.: Am. J. Obst. & Gynec. **89**: 137, 1964.
4. Crossen, H. S. and Crossen, R. J.: Diseases of Women, ed. 9, 1944, C. V. Mosby & Co., p. 843.
5. DeForest, R. E.: J.A.M.A. **153**: 1285, 1953.
6. Hall, H. H., Stone M. L., Sedlis, A. and Chabon, I.: Fert. and Steril. **15**: 618, 1964.
7. Jalundhwala, J. M.: Brit. J. Urol. **34**: 335, 1962.
8. Lockhart-Mummery, P.: Diseases of the Rectum and Colon. ed. 2 London, 1934, Bailliere Tindal Cox. p. 379.
9. Munshi, P. H.: (1966) Personal Communication.
10. Murphy, M. C.: Lancet **2**: 1369, 1933, as reported by Oppenheimer W.
11. Oppenheimer, W.: Am. J. Obst. & Gynec. **78**: 446, 1959.
12. Thakore, S. P.: (1966) Personal Communication.

Fig. on Art Paper I