The Neglected Pessary

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THE ARRAY of foreign bodies which finds its way into the juvenile vagina is limited only by the capacity of this organ and by the imagination and resourcefulness of the child. In an older age group it is more surprising that long-retained tampons are occasionally discovered because a distressing leukorrhea sends the Junior Miss to her physician. Without presenting a pro or con brief on the now-common use of internal absorption pads for menstrual protection, the author cites 2 cases in which seemingly sophisticated fourth-year medical students sought relief from a leukorrhea which must have been as noticeable to others as it was to themselves. The responsible but unremembered tampons had been in the upper vagina for who knows how long, but the subsequent tampons, the women insisted, had been duly removed at proper intervals.

Pessaries continue to have their rightful place in the practice of medicine. Their use in furnishing bladder support and in relieving the symptoms referable to prolapse or retroversion of the uterus is particularly indicated while the patient awaits delayed surgery, and in those cases in which such conditions as general debility or constitutional disease interdict an operation. Temporary use of a suitable pessary will often permanently restore a heretofore retroflexed uterus to the forward position. It is equally true, however, now that the advantages of surgery are becoming increasingly available that such devices are, generally speaking, being discarded for long-term care.

Pessaries should be individually fitted. Too small a pessary to be held in place serves no purpose and may drop out of the vagina, whereas one too large will produce pressure necrosis with ulceration of the vaginal wall. The patient should also be informed of the presence of the pessary and of the need for periodic examination of the vaginal mucosa with re-appraisal of the indications for continued use of the device. Cleansing of the pessary at appropriate intervals is imperative. Any vaginitis or cervicitis resulting from the pessary should be promptly treated. In such cases, along with the therapy applied, a holiday from the use of the pessary is frequently helpful in promoting healing.

In general, my experience with long-retained foreign bodies in the vagina has led me to believe that greater emphasis than has heretofore been given should be placed on the hazards which can result from the abandonment of pessaries in the vagina.

CASE REPORTS

Case 1

R. K., a 42-year-old school teacher, first presented herself on February 18, 1946, because of pelvic pain of 3 months' duration. There had been no menstrual irregularities and no pregnancies. The pain had been quite constant, but was accentuated at the menses and at coitus. On examination the vaginal mucosa seemed intact, and there was no leukorrhea. The cervix appeared congested, but the uterus was of normal size and contour. The adnexa could not be palpated. Behind the uterus a

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thumb-sized sensitive mass was noted. The temperature was 37.4 C.; the white blood count was 9900. Hot douches and pelvic diathermy were prescribed. Two weeks later the mass was noted to be unchanged in size and sensitivity. On examination after another 2 weeks the pain had largely subsided. Exploration of the rectum revealed an area of induration approximately 2 cm. in diameter. A bristle-like object was felt projecting into the lumen from this zone. Using a proctoscope, this object was recognized as a short wire or needle. A gentle tug with a long clamp freed the foreign body, which was presenting by its pointed end. At first it was difficult to identify the wire, which was 0.7 inches long (Fig. 1*a*). There had been no history of previous surgery. The wire with a loop at one end resembled the core from an arm of a wishbone pessary. After close questioning the patient recalled that during a European honeymoon in 1938 some physician had inserted a contraceptive device which he said would be harmless and which could be removed at will when a pregnancy was desired. The episode of the pessary introduction had long since been forgotten.

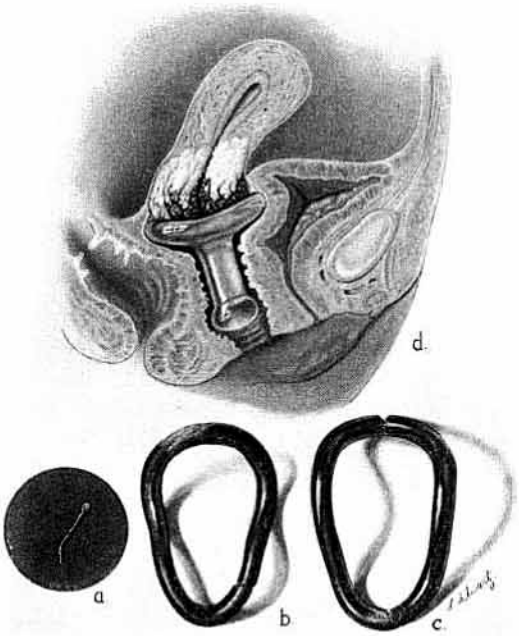

Fig. 1. *a*. Spring wire from contraceptive pessary introduced 8 years before. The rubber coating had disintegrated. *b* and *c*. Hodge-type pessaries which had been in situ for 11 and 10 years, respectively. Note encrustations. *d*. Gellhorn pessary entrapped in the vagina for 7 months. Note carcinoma of cervix behind pessary.

Following removal of the wire, symptomatic recovery was prompt. Roentgen rays showed no further metallic object in the pelvis. When last examined in 1951 the patient was enjoying good health. The menses were still regular, and the pelvic structures seemingly normal on palpation. There was no evidence of a fistulous tract. The patient's long hope for a pregnancy has, however, not yet been gratified.

Case 2

R. S., was a 62-year-old farmer's wife, para 4. Following the menopause at age 51, a pessary was inserted for "falling of the womb." The patient forgot about the pessary, following the death of her physician, and wore it unchanged for 11 years. A leukorrhea that resisted self-treatment with douches finally led to pelvic examination in December, 1947. A red vulvitis and diffuse vaginitis was noted, along with the causative ring pessary of the Hodge type. This was held securely in place by the adhesions which had formed between the anterior and posterior vaginal walls within the periphery of the pessary. These adhesions were readily broken up with a finger; however, the vaginal wall below the pessary was so shrunken that the pessary had to be cut through before its delivery was possible (Fig. 1*b*). Despite deep ulceration behind the cervix and diffuse vaginitis, recovery was prompt. At the time of final examination, 8 weeks after removal of the pessary, the vaginal mucosa was intact, apart from the changes usually associated with postmenopausal atrophy.

Case 3

L. F., a 69-year-old widow, para 3, was admitted to the hospital because of cardiac disease. During the routine physical examination a foreign body was noted within the vagina. This had apparently been causing no severe symptoms. The patient recalled that some 10 years earlier a pessary had been introduced into the vagina because of prolapsus. There had been no subsequent discomfort; and with relief from symptoms, she promptly forgot the presence of the ring, which was now so securely fixed in the vagina that its removal required general anesthesia.

Ulceration of the anterior and posterior walls of the vagina was followed by firm

coalescence and healing of the opposing surfaces of the vagina within the perimeter of the pessary. The part of the pessary lying immediately below and behind the symphysis pubis was cut through. The pessary was then rotated through an arc so that the retrocervical portion lay at the outlet. This presenting portion was then divided, and the right and left halves of the pessary were drawn through and out of their respective channels (Fig. 1*c*).

Examination 5 months later showed the vulva and lower vagina to be healthy. The upper vagina was entirely obliterated. The patient had thus acquired the satisfactory result attributed to a successful LeFort type of operation.

Case 4

T. K., a 44-year-old para 3, was admitted to the hospital because of pelvic pain of 2 weeks' duration. Seven months earlier a vaginal pessary of the Gellhorn type had been inserted. From then on until the time of hospitalization on February 2, 1949, the patient had not been re-examined, nor had the pessary been changed. Because the vaginal wall had contracted around and below the rim of the pessary (Fig. 1*d*), no menstrual bleeding had occurred following introduction of the pessary. This presumably caused the patient no apprehension, as she believed that she was experiencing the menopause.

Anesthesia was required for removal of the pessary. Behind this pessary approximately 40 cc. of foul-smelling, chocolate-colored, purulent material had collected and an extensive carcinoma was found to have invaded the cervix. Moderate induration of the parametrium was present.

Following microscopic confirmation of the diagnosis, the patient was given a full course of therapeutic x-rays directed at the pelvic structures through several portals. She then received 5040 mg.-hours of radium on April 14, 1949. It was apparent on subsequent examination that the carcinoma had not been destroyed and had instead continued to spread. Inasmuch as it was believed that surgery of the radical type might offer the only active therapy still available, complete pelvic exenteration was performed on May 2, 1951. The patient survived this drastic procedure only 36 hours.

While the pessary probably bore no relationship to the etiology of the cancer, which may in fact have been present when it was inserted, the pessary's damming back the discharge from the uterus and cervix delayed recognition of the tumor and therefore forfeited the improved prognosis that comes from prompt detection and treatment.

The four cases described have this in common—they illustrate the patient's total disregard of principles which should apply to the use of pessaries. In every instance the patient did not return to her physician for check-up. Perhaps the physician himself was derelict in not sufficiently stressing the need for this check to the patient. Modesty may often cause the patient to avoid re-examination. Attention to such matters may also understandably be lost to consciousness and memory in older women.

A pessary abandoned in the vagina may produce as much mischief as an instrument left in the abdominal cavity. Besides being offensively odorous, the long-continued use of the pessary, without examination and cleansing, may be dangerous.

A pessary which is too large or poorly fitting, if maintained in the vagina for long without changing, will produce changes ranging in severity from a mild leukorrhea to ulceration and fistula formation. Its presence may cause an increase in the number and variety of bacterial organisms. The inflammatory reaction may be more marked in older women in whom reduced local circulation, senile atrophy, and shrinkage of the vagina have already set in. Pruritis of the vulva, secondary to the leukorrhea, may also be ascribed to this vaginal support.

The foreign body inflammatory reaction, when supplemented by pressure, results first in thinning of the mucosa. In time, excoriation follows, with actual ulceration at points where the device is being impressed against the mucosa. Plastic healing or union of the opposing denuded surfaces may occur, but this should not justify the hope that neglect will correct the condition for which the pessary was introduced. Unchecked, the inflam-

matory reaction may well proceed to cause parametritis.

The author has personal knowledge of a rectovaginal fistula which resulted from the long-continued and neglected use of a ring pessary. While it is difficult to prove that irritation resulting from the pessary may actually be a precursor to carcinoma, the causal relationship between the pessary and the carcinoma is frequently mentioned. Case 4 illustrates how symptoms of carcinoma may be masked by the use of a pessary.

The specific disorders created by the use of the pessary, unless they are far advanced, will usually disappear promptly after removal of this foreign body (thanks to the remarkable recuperative powers of the vaginal mucosa). Whenever a vaginal support is introduced, the patient should be fully aware of its presence and of the need for periodic prophylactic examinations to see that it continues to serve its intended purpose safely. Simple cleansing douches between examinations are recommended for hygienic reasons. Any one of numerous suitable local medicinal agents will promote the healing of the mucosa. Estrogen creams seem particularly helpful in the postmenopausal patient.

After removal of the pessary, the vaginal mucosa should be carefully inspected for evidence of inflammation or excoriation, and before re-insertion, the pessary should be thoroughly cleansed. If examination shows that the pessary is poorly tolerated, its use should be discontinued, at least temporarily.

SUMMARY

A well-fitted, comfortable pessary may serve a very useful purpose in the nonsurgical treatment of various uterine misplacements. However, operative correction is to be preferred unless specifically contraindicated in the long-term care of the patient. Because the pessary is a foreign body, care must be exercised lest it contribute to more pathology than it is intended to correct.

The physician and patient share in the responsibility of not underestimating the potential hazards that result from a neglected pessary in the vagina.

Four cases illustrative of the hazards of abandoned pessaries are presented.