In the discussiou of this paper, ZWEIFEL agreed with the reader that gauze did not really drain the uterine cavity. He had abandoned the use of iodoform gauze as a vaginal tampon in cases of hemorrhage, preferring to use pledgets of cotton saturated with acetate of aluminium. Gauze introduced into the uterus checks hemorrhage, but only in the same way as any foreigu body, *i. e.*, by causing contraction of the organ. He was inclined to go still farther and to affirm that gauze when introduced into the peritoneal cavity acts purely as a tampon and not as a drain.

DÖDERLEIN expressed the same opinion with regard to the inefficiency of so-called uterine gauze drainage. He was opposed to the common practice of applying a caustic to the raw surface left after curettage. Iodoform gauze has no medicinal action within the uterus; the iodoform is simply mingled with the blood-clot and is not absorbed at all.

[We are glad to receive such weighty support of an opinion which we have held for some time, in spite of our habitual use of the gauze drain after curettage. Notwithstanding the emphatic commendation of this practice by eminent American gynecologists, we have long been in doubt as to the amount of drainage secured by tamponade of the non-puerperal uterus, even after the cervix has been thoroughly dilated. In our experience not only has a frequent slight rise of temperature during the first twenty-four hours after operation indicated retention of secretions, but drainage has only been free *after removal* of the gauze. Sänger's well-known iconoclastic tendency is supported by so much native keenness and common sense that we cannot afford to treat lightly his criticism of this generally-accepted practice.—ED.]

SURGICAL TREATMENT OF FIBROMYOMA OF THE UTERUS.

THIS subject continues to excite the keenest interest among abdominal surgeons here and abroad, as shown by the prominence assigned to it in recent society discussions. Not to speak of the papers read before our own societies during the past three or four months, the following have appeared in foreign journals:

LEOPOLD (*Centralblatt für Gynäkologie*, 1894, No. 26) reports twenty operations with one accidental death at the end of the third week, due to pulmonary embolus. He claims for his method of intra-peritoneal treatment of the stump that it reduces the loss of blood to a minimum, shortens the operation, and thus eliminates the element of shock. In one hundred and sixty operations for fibromyoma performed since 1889 by all methods (including forty-six cases of enucleation per vaginam and forty of castration), his mortality was only 2 5 per cent. In twenty-four cases of total vaginal extirpation of the fibroid uterus there was no death, while the total mortality in ninety abdominal operations was only 4.4 per cent. The writer's preseut technique in supra-vaginal amputation is as follows: After deliveriug the tumor the upper part of the incision is closed. The broad ligaments are ligated with silk, the uterine arteries and veins being tied *en masse* when the stump is small, without securing the latter with an elastic cord. If, by reason of the unfavorable conditions, it is impossible to isolate the uterine arteries, the base of the tumor is surrounded with a rubber cord, the capsule is split, and the growth partially enucleated. The peritoneum is then dissected off as low as the cord, *i. e.*, to the point of attachment of the bladder, the tumor

is removed, and the stump trimmed down as much as possible, the vessels being at the same time ligated at about the level of the os internum, and the ligatures cut short. The cervical canal is cauterized, then the stump is transfixed and ligated in two portions with stout silk ligatures, which are also cut. The peritoneal flaps are carefully sutured over the stump with fine silk, including a portion of the subjacent cervical tissue, all pockets around the uterus having been previously covered over with peritoneum. The abdomen is then closed without drainage.

DEMETRIUS (*Ibid.*) describes a somewhat similar operation which, in his hands, was attended with a mortality of only 4.3 per cent. in twenty-four cases. He curettes the uterus and cauterizes the cervical canal as a preliminary step. In ligating the uterine arteries a portion of the uterine tissue is purposely included on either side, which not only serves as an efficient safeguard against hemorrhage, but renders the elastic cord superfluous. If there is much bleeding from the stump it is transfixed on both sides, the ligatures being passed through the tissue just outside of the cervical canal from before backward. If the stump is large other ligatures may be used, but as none of these encroach upon the canal, it is left open for drainage, which is favored by the introducion of a strip of gauze. The raw surfaces are not covered with gauze. The peritoneal folds are simply allowed to fall together without being sutured.

The same writer thus summarizes with regard to the treatment of fibromyoma: All methods of treatment, including Apostoli's, which do not aim at the actual removal of the growth are to be regarded as simply palliative. Castration is an uncertain measure, has only a limited application, and is opposed to the essential principles of conservative surgery, since the healthy (?) ovaries are sacrificed. Progressive increase of existing symptoms is an indication for removal of the tumor; palliative treatment under these circumstances simply aggravates the trouble and affects unfavorably the prognosis of the radical operation, hence the latter should be elected early. Vaginal extirpation of the myomatous uterus, when possible, is preferable to the abdominal method. Supra-vaginal amputation gives better results than total abdominal extirpation, and the intra-peritoneal method of treating the stump is preferable to the extra-peritoneal. There is no reason why the mortality of supra-vaginal amputation should not be as low as that of ovariotomy.

THE CAUSE OF PAIN IN UTERINE FIBROMYOMA.

QUÉNU (*Gaz. Méd. de Paris*, 1893, No. 48) attributes the pain in fibromyoma to several factors, chief among which is pressure of the tumor upon the sacral plexus, especially if it is impacted in the pelvis, or upon the lumbar plexus when it extends upward into the abdominal cavity, or is freely movable. Severe pains are also referable to pressure of the tumor upon the ovary, when the latter is healthy. Irritation of the peritoneum, especially in Douglas's pouch, may cause pain, even when there is no peritonitis. Inflammation of the growth itself, of its serous covering, and of the tubes and ovaries, are also important factors. Retention of blood within the uterine cavity and infection of the same may readily lead to inflammatory conditions in the tumor, on account of the rich vascular supply of the endometrium and its intimate relation to the fibro-muscular tissue in the broad ligament.