of the urethra : the last possibility was unlikely because of the freedom from urinary disturbance.

Operation.—One hour later the child was taken to the theatre and anaesthetized and a further examination was carried out. The swelling had increased in size, and purple-black areas, in addition to a large blister, were present on its surface. It comprised the prepuce and glans clitoris, which were much engorged and presented as two distended shiny prominences. At the base of the swelling one could feel a firm constriction, so beneath this a probe introducer was placed and the constriction divided. A fine thread about 1 in. in length, with closely cut knot at one end, was found to be the cause of the strangulation. The urethra, vagina, and rest of the vulva were normal.

The following morning the swelling was less congested, and 10 days later the clitoris had assumed its normal appearance. I was very puzzled to know how the thread came to be round the clitoris. After a short conversation with the child she admitted that she had twisted a piece of cotton round the skin in front, but gave no reason for doing so.

It is interesting to note that for homework she had to write an essay on "life in hospital." We may assume that her brief visit to the Radcliffe Infirmary would add considerable local colour to this literary effort. Should this young lady contemplate taking up surgery as a career, her ability to tie knots in any situation would be, I think, unchallenged.

This case was shown at the Section of Obstetrics and Gynaecology of the Royal Society of Medicine on March 18, 1949.

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Pyometra after Pelvic Floor Repair

Pyometra is a well-recognized complication of carcinoma of the body of the uterus or of the cervix, especially after stenosis by radium, but the following case seems to be unique.

CASE REPORT

A married woman aged 65 was admitted to hospital on October 30, 1948, suffering from acute retention of urine. In January, 1948, she underwent operation at another hospital for removal of a cervical polyp and repair of the pelvic floor. Nine months later she was readmitted on account of rectal discomfort, and underwent a second perineorrhaphy. Two days after her discharge following this second operation she developed complete retention of urine, and had been catheterized twice daily for five days when I first saw her. The last two attempts at catheterization had failed to produce any urine.

On examination she looked ill and complained of considerable abdominal pain. She was extremely dehydrated, with a dry brown tongue and dry lips. Her temperature was 100.4° F. (38° C.) and pulse 96. The fundus of the bladder, which was acutely tender, was just below the umbilicus. Pelvic examination showed a pronounced forward displacement of the posterior vaginal wall, which was oedematous. The stump of the amputated cervix was just palpable and felt normal. Rectal examination revealed a tender cystic mass which was not displaceable filling the pouch of Douglas. The provisional diagnosis was a twisted ovarian cyst incarcerated in the pelvis and presumably by this time gangrenous.

An anaesthetic was required for the passage of a catheter, which produced 45 oz. (1.28 litres) of foul-smelling urine containing macroscopic pus and shreds of mucosa. The whole picture was one of obstructive retention of urine, with severe secondary cystitis and commencing sloughing of the bladder mucosa.

At operation, after the patient had received 3 litres of glucose-saline intravenously, the pelvic mass was found to con-

sist of the body of the uterus in the shape of a large soft thin-walled sac of a dusky mottled colour lying retroflexed and firmly incarcerated below the promontory of the sacrum. With difficulty this was manoeuvred out of the pelvis and a subtotal hysterectomy carried out. During the process of displacing the uterus upwards the posterior wall, which was completely necrotic along the line of retroflexion, ruptured and about 1 pint (568 ml.) of foul-smelling purulent fluid poured into the lesser pelvis. This was removed by suction and swab, and there was no soiling of the major abdominal cavity. Examination of the cervical stump showed no evidence of neoplasm. A drainage tube was inserted through the posterior fornix and the cervical stump covered with penicillin-sulphonamide powder before closing the abdomen.

Examination of the excised uterus revealed several intramural myomata, with one submucous myoma the size of a pigeon's egg. The pathologist reported that the uterine cavity had been completely denuded of endometrium by an acute inflammatory process. There was also acute myometritis but no evidence of any malignant change. Culture of the pus was sterile.

The post-operative progress was surprisingly uneventful, and catheterization was required only once. The urine was free of pus cells at the end of ten days, and the patient was out of bed on the fourteenth day.

When re-examined at the follow-up clinic two months later, she had put on 10 lb. (4.54 kg.) in weight, and the pelvis appeared quite healthy. Cystoscopy showed a healthy bladder mucosa and both ureters functioning normally.

COMMENT

The following facts emerge from this case : (1) Pyometra due to cervical stenosis is presumably often sterile, and pelvic spill of the contents is not a major disaster. (2) Amputation of the cervix, which is part of the standard procedure in the Fothergill type of operation, should be carried out with due care to prevent subsequent stenosis, even in patients well past the menopause, and elimination beforehand of uterine pathology is particularly important.

Two conditions are essential for the development of pyometra—secretion from the endometrium, and obstruction at the outlet.

It seems probable that amputation of the cervix would result in many more cases of pyometra but for the following facts. (1) Before the menopause, as has now been shown by Sjövall (1938) and by Wollner (1942), the tall cylindrical epithelium of the endocervix reacts to the oestrogenic stimulus, and under this influence rapid regeneration takes place. Thus opposing raw surfaces are rapidly epithelized and adhesions are prevented. This rapid epithelization also prevents the local ingress of infection, with its follow-up of adhesion of opposing granulating surfaces or of fibrosis and rigidity of the cervix. (2) After the menopause the normally atrophic endometrium is non-secretory; therefore, even with complete cervical stenosis, there is no intrauterine accumulation.

It is conceivable that some cases of trigonitis which persist after a good anatomical pelvic floor repair are due to lesser degrees of this type of stenosis endometritis, as the lymphatic and blood vessels of the lower uterine segment are in intimate communication with those of the base of the bladder.

I would like to express my thanks to Mr. Melbourne Thomas, the medical superintendent, for permission to publish this case, and to Dr. D. C. Taylor for the report on the pathological details.

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