SPONTANEOUS ENDOMETRIAL REGENERATION FOLLOWING COMPLETE ATROPHY SECONDARY TO CHRONIC UTERINE INVERSION.

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A rare case of spontaneous resumption of menses and pregnancy following complete atrophy of endometrium secondary to chronic puerperal inversion of the uterus is presented and probable factors for endometrial regeneration are discussed.

CASE HISTORY:

HO, a 22 year old mother of one child was admitted to the hospital because of heavy vaginal discharge, lower abdominal pain, amenorrhea, weakness and inability to carry out her normal activities of more than six months duration.

According to the patient, about 18 months ago, she delivered her first child after an uneventful term pregnancy. This was done at home by a local midwife.

Immediately after the delivery of placenta she fainted and it was one or two hours before she fully recovered.
GENERAL PHYSICAL EXAMINATION

The patient was a slender, undernourished, asthenic and anemic woman who was in moderate distress due to apprehension and discomfort. Temperature 99.6 F, Pulse 104/min, B.P. 95-50 in both arms. The positive physical findings were limited to the pelvis. Vulva was irritated and tender. The vagina contained large amount of mucopurulent discharge. The vaginal walls were very sensitive to touch and were uniformly inflamed and edematous. No cervix was seen, instead there was a soft bulge mass covered with necrotic material and pus. On bimanual examination no uterine fundus could be palpated. With above findings the diagnosis of chronic uterine inversion was made. Papanicolaou smear and a generous punch biopsy of the inverted endometrium were done. Because of bleeding from the biopsy side a vaginal pack was inserted which was removed the next day. The above procedures were done on the patient's first outpatient visit. After admission, laboratory data revealed a hemoglobin of 8.5 gm., Hematocrit 29%, white blood cells of 12000, erythrocyte sedimentation rate was 30 mm in the first hour. Urine analysis was normal. Gram stain of vaginal discharge showed mixed infection. Vaginal culture grew coliform bacilli, streptococci, staphylococci and diphtheroid organisms. On cytologic examination, no malignant cells were seen, but there were large amounts of inflammatory cells. Histology showed absolute endometrial atrophy, Fig.1. The patient was given broad spectrum antibiotics, vaginal suppositories, high caloric diet and Iron. 3 weeks after admission when the patient's conditions had improved considerably she was taken to the operating room and the inv...
ersion was corrected using Haultain technique. The postoperative course was uneventful and she was discharged from the hospital ten days post surgery.

The patient did not return to us until 19 months later when she was admitted to the hospital because of incomplete abortion of a 6 weeks pregnancy. Uterine curettage was performed. She signed herself out on the same day of admission. Pathology report of the curettings showed placenta tissues. Four months later the patient became pregnant again and this time she carried the gestation to term and was delivered of a baby girl weighing 3000 grams. Her postpartum course was uneventful and she left the hospital in good condition to be seen in outpatient clinic 6 to 8 weeks later.

She was seen in the clinic several times thereafter. Figures 3 and 2 show the endometrial biopsy taken three and four months postpartum. These microphotographs show proliferative and secretory endometrium respectively on the third and fourth month after the normal pregnancy.

COMMENTS

Secondary amenorrhea of endometrial causes occurs when endometrium is either entirely removed by overenthusiastic curettage or completely destroyed by irradiation, instillation of caustic material in uterine cavity, severe inflections or a combination of direct exposure of vaginal environment due to uterine inversion and infection as in our patient. In the latter case the corpus atrophies in vagina and becomes covered with dry and slight cornified epithelium. Menorrhagia, leukorrhea, irregular vaginal bleeding associated with dragging pain in the lower back and a feeling of bearing down
usually but not always preceds amenorrhea.

Unlike tuberculous endometritis in which following treatment, regeneration of endometrium and normal menstruation after complete destruction of endometrium has been seen not uncommonly, spontaneous resumption of menstrual periods and pregnancy following chronic inversion and complete atrophy of endometrium has been extremely rare.

It has been proven that despite amenorrhea of this kind, the ovaries maintain their normal cyclic function as demonstrated by biphasic basal body temperature curves and the fact that our patient became pregnant.

The reason for resumption of menstrual period spontaneously in our case who has been amenorrheic for close to one year is not clear to us. One can assume that improved blood supply, removal of endometrium from hostile vaginal environment may be causative factors in this rare instance. The reason for her abortion could have been incomplete regeneration of the endometrium.

REFERENCES

4. Kuppermann, Endocrinology 1964 Volum I.