ADENOCARCINOMA-IN-SITU
OF THE ENDOCERVIX
WITH CO-EXISTENT
INTRAUTERINE PREGNANCY:
REPORT OF A CASE
AND REVIEW
OF THE LITERATURE

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# SUMMARY

A case is presented illustrating the unusual co-incidence of adenocarcinoma in-situ of the cervix with an intrauterine pregnancy. The case and its management are briefly discussed in light of the paucity of similar cases in the literature.

Although the incidence of invasive adenocarcinomas of the uterine cervix may be increasing among all cases of cervical neoplasms (¹), the occurrence of *in situ* adenocarcinoma of the cervix with a co-existent pregnancy is rare. Guidelines for management are not well defined, and the biologic behaviour of this lesion is unclear. A case is presented illustrating this rare lesion and the management briefly discussed.

#### CASE REPORT

P. H., a 36-year old Caucasian Gravida 7. Para 4, Abortus 2 underwent a spontaneous abortion in September, 1980. D & C was performed following the spontaneous abortion, and postoperative examination in November was negative except for a Class IIIA Pap smear interpreted as consistent with moderate endocervical dysplasia. Colposcopy was performed in late January, 1981, and revealed an atypical transformation zone with an area of white epithelium extending from 4 o'clock to 11 o'clock on the everted cervix, with a markedly abnormal vascular pattern noted at 5 o'clock. Directed biopsy of this area revealed adenocarcinoma insitu. At the time of the colposcopically directed biopsy, the patient's last menses occurred December 12, 1980. UCG was positive and bimanual examination was consistent with a 6 to 8 week intrauterine pregnancy.

The patient was in otherwise good general health. There was no history of oral contraceptive usage. Her obstetrical history was unremarkable except for 2 previous spontaneous abortions, both occurring at 6 to 8 weeks gestation. Personal history revealed previous marriage at age 18, first sexual exposure at age 15, and a total of 7 sexual partners.

Conization of the cervix was performed under general anesthesia on February 5, 1981, without incident. The fundus under anesthesia was consistent with an 8 to 10 week gestation. The patient developed vaginal bleeding on the fourth postoperative day which ceased with bedrest. Ultrasound confirmed an 8 to 10 week viable intrauterine pregnancy. The patient was discharged on the seventh postoperative day and followed as an out patient to continue prenatal care. Longrange plans were made to perform Caesarean hysterectomy at term.

The patient did well until mid-March of 1981, when she presented to the Admitting

Department febrile to 102.4°. She complained of lower abdominal cramping and a purulent vaginal discharge. Examination revealed cervical fullness and cervico-uterine tenderness. Ultrasound demonstrated non-viable pregnancy. The patient was then placed on intravenous Cephalothin, Gentamycin, and Clindamycin and spontaneously passed necrotic products of conception three days after antibiotics were begun. The antibiotic regimen was continued for 10 days, 5 full days after the patient had become afebrile. There was good involution of the uterine fundus on examination performed May 5, 1981.

remarkable. She was discharged on the sixth postoperative day and subsequent vaginal Pap smears have been unremarkable.

## PATHOLOGY

Microscopic examination of the colposcopically directed biopsy revealed adenocarcinoma *in situ* of the endocervix, showing several malignant glands, containing cells with large nuclei and frequent mitoses (fig. 1). The conization specimen was

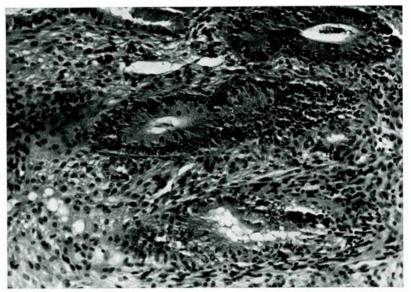


Fig. 1. — Colposcopically-directed biopsy showing foci of adenocarcinoma-in-situ admixed with normal endocervical epithelium. Note frequent mitoses and large nuclei with intact basement membrane (H. & E. Stain, × 140).

The patient then decided against further child bearing and requested that the hysterectomy, originally planned at the time of delivery, be performed to rule out residual disease. Pap smear at this time was Class II, showing mild endocervicitis.

On May 14, 1981, she was explored and underwent extrafascial total hysterectomy, left salpingo-oophorectomy, conservation of the right adnexa, and selective pelvic and para-aortic lymphadenectomy.

There was no evidence of intra-abdominal or retroperitoneal pathology encountered. The patient's postoperative course was entirely unadequate and revealed mobile foci of adenocarcinoma *in situ* extending from 6 to 11 o'clock, completely excised with no dysplasia or neoplasia in the ectocervical or endocervical margins. Careful sectioning of the residual cervix at hysterectomy revealed no residual tumor. The endometrium was found to have chronic inflammation present, but the remainder of the excised specimen was entirely unremarkable. Excised lymph nodes showed inflammatory hyperplasia.

## DISCUSSION

The case presented illustrates the unusual co-existence of pregnancy and adenocarcinoma *in situ* of the cervix. After colposcopically directed biopsy disclosed this unusual lesion, the patient was properly managed by diagnostic conization to rule out invasion. The conization revealed multiple foci of the same lesion, and the margins appeared clear. The question of adequacy of the cone specimen was confirmed at hysteroctomy, which revealed no residual neoplasm.

The unfortunate occurrence of septic abortion in this patient was undoubtedly a complication of the conization. The patient admitted to early resumption of sexual intercourse after the surgery, although this was strictly interdicted by her physicians at the time of her discharge from the hospital.

Although the co-incidence of cervical adenocarcinoma and pregnancy is known, we were able to locate only one other case in the literature of the *in situ* form of this lesion occurring in pregnancy. The case of Matey and Gallup was similarly

managed, but residual *in situ* adenocarcinoma was found at hysterectomy (3).

We support the view of many workers that conization is necessary to exclude invasion (<sup>2-4</sup>). Extrafascial total hysterectomy, recommended by Qizilbash (<sup>4</sup>), would seem to be definitive therapy for *in situ* adenocarcinomas, if further child bearing is not at issue.

The biologic behaviour of *in situ* adenocarcinomas is not as well appreciated as *in situ* squamous lesions, and the safety of therapeutic conization alone in these patients is unknown. The ideal management of this rare lesion, therefore, awaits further experience as cases are accumulated.

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