EPIDERMOID CARCINOMA OF THE BODY OF THE UTERUS

(A Case Report)

by

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Primary squamous cell carcinoma of the body of the uterus is rare. As Gellhorn (1963) states, the condition is sufficiently extraordinary and interesting histogenetically to justify the publication of every new case.

In 1928, Lahm found about 20 authentic cases from the German literature. So far about 26 cases have been reported.

Peris, *et al* (1958) have laid down the following prerequisites for the diagnosis of primary squamous cell carcinoma of the uterine corpus.

(1) There should be no evidence, past or present, of squamous cell carcinoma of the cervix; if the cervix is invaded it must be minimal and limited to the region of the cervico-uterine junction.

(2) If adenocarcinoma of the endometrium is also coincidentally present, the squamous epithelium from uterine corpus must be carefully studied to ascertain whether it is malignant or merely the squamous component of an adeno-acanthoma.

Case Report

A sixty-two years' old Hindu female was admitted on 27th February, 1969, with the chief complaints of fever with rigors, profuse vaginal discharge and backache since 8 days. She had slight prolapse since several years but the cervix descended out of the introitus a week ago. She was treated outside for the fever but as she did not improve she came to the hospital.

Past History: No history of similar bouts of fever. History of coronary disease 4 years ago. No history of dilatation and curettage.

Past Menstrual History—Periods were regular and flow was normal. Present Menstrual History—Menopause since 18 years.

Obstetric History—9 Full term normal deliveries with 7 living children. Three abortions in 2nd or 3rd month. Last delivery was 22 years ago.

On examination, patient was a short statured, thin, elderly woman of average intellect. There were no signs of anaemia or lymphadenopathy. Thyroid was not enlarged. Temperature 100° F, pulse 96 per min., B.P. 160/100 mm. of Hg.

Respiratory and cardio-vascular systems —Clinically N.A.D.

Per abdomen—Abdomen soft; liver and spleen not palpable.

On vaginal examination—a large cystocele with keratinisation of anterior vaginal wall was seen; There was rawness of posterior vaginal wall and descent of the cervix out of the introitus. The external os was pin-point and exuding beads of pus. The uterus was anteverted, bulky, about eight weeks' size, and fornices were clear.

The following investigations were done:- Total R.B.C.—3.8 millions/c.mm.; Hg% —66%; total W.B.C.—11,800 /c.mm.; polymorphs—68%, lymphocytes—29%, monocytes—1%, eosinophils—2%.

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Estimation of Sedimentation Rate, 66 mm. at end of 1 hour.

Blood Sugar—115 mgm. %. Blood Urea —29 mgm. %. Urine and stool—normal. Screening of chest—lungs clear. Electrocardiogram showed myocardial ischaemia.

The patient was treated as a case of pyometra. A course of penicillin injections was given. Hypertension was controlled by phenobarbitone, gr. ½ T.D.S. She responded to antibiotics and was afebrile. On 12th March, a dilatation of the cervical canal was attempted to drain the pyometra, but the external os was markedly stenosed and the cervix could not be dilated. In a few days time, the size of the uterus was considerably reduced, the temperature remained normal and the blood pressure had settled to 100/90 mm. Hg. In view of the pyometra, malignancy of the uterine body was suspected. On 22nd March, 1969, the patient was well enough to stand a vaginal hysterectomy with bilateral salpingo-oophorectomy under spinal anaesthesia with continuous oxygen. By vaginal approach a fair amount of vaginal mucosa around the cervix could be removed, as well as the keratinised area of the anterior vaginal wall, together with a repair of the cystocele.

The post-operative period was uneventful. There was a small sinus in the perineum which healed after a few days. The patient was then given deep x-ray therapy, a total of 3600 r, through two anterior and two posterior portals, the total dose to each anterior portal being 1000 r and to each posterior portal being 800 r.

The patient has been followed up and has no recurrence so far.

Histopathology Report

Gross observation—specimen of uterus, measuring 9 cms., with both tubes and ovaries.

The endometrium shows a small papillary growth attached to the lateral wall measuring 1 cm. across. The cervix shows an eroded appearance; ovaries show no abnormality.

Microscopical examination: Sections from the body of the uterus show complete replacement of the endometrium by a stratified squamous epithelium. The cells show loss of polarity, hyperchromatism and variability of the size of the nuclei. Groups of tumour cells show superficial infiltration into the subjacent tissues (Fig. 1). Section from the cervix shows hyperkeratosis and subepithelial exudate of chronic inflammatory cells. Ovaries show corpora albicantes. Diagnosis: Epidermoid carcinoma of the body of the uterus.

Comments

Squamous metaplasia was first described in 1882 by Ruge and Veit (1882). Fluhmann (1953) has postulated three ways in which squamous metaplasia of the endometrium may occur.

Squamous epithelium from the cervix may grow in over denuded, recently sloughed glandular epithelium. This does not explain the presence of isolated patches of squamous epithelium high in the endometrial cavity.

The second possibility is derivation of squamous epithelium from foetal or embryonal cells. In 1910, Meyer demonstrated that in early intrauterina life the squamous epithelium extends high into the endocervical canal and sometimes into the lower part of the corpus. At sixth month, the columnar epithelium appears to grow downward, ultimately replacing the original squamous epithelium of the endocervix. Meyer (1910) believed that the basal cells of the original squamous epithelium remain beneath the columnar epithelium and later in life, after a weakening of the cylindrical lining, the basal cells proliferate and mature into squamous epithelium.

Gellhorn (1936) thinks that certain embryonic, undifferentiated cells of the primitive lining of the genital tract may persist in adult life as inclusion within the glandular epithe-

lium. These cells retain their totipotentiality and with the proper stimulus develop into squamous epithelium.

Squamous epithelium within the uterus may originate from an indirect metaplasia of the so called "basal cells" of the endometrium which are present as islands of cells beneath the columnar epithelium and when stimulated will form either columnar or squamous epithelium. It seems improbable that embryonic rest tissue would remain after menstruation and pregnancy.

Factors which would cause the growth of squamous epithelium in the uterine corpus are dilatation and curettage, intrauterine application of iodine, carbolic acid or formalin. Similar epithelial changes have been described with tuberculosis of the endometrium, chronic inversion of the uterus and vitamin A deficiency.

In reviewing cases of true primary squamous cell carcinoma of the uterine corpus, 20% were associated with or followed by pyometra. In many cases the pyometra occurs without any cause.

The earliest manifestation of malignant change in the transformed endometrium of squamous metaplasia is called intra-epithelial carcinoma or carcinoma in situ. The age incidence in these cases ranged from 44 years to 78 years.

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See Fig. on Art Paper VI