Deciduoma malignum / by Albert M. Judd.

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DECIDUOMA MALIGNUM.[1]

BY

ALBERT M. JUDD, M. D.,

Brooklyn, N. Y.

Gynecologist to Jewish and Swedish Hospitals; Obstetrician to Kings County Hospital; Adjunct Gynecologist to Long Island College Hospital; Consulting Gynecologist to St. Joseph's Hospital, Far Rockaway; Consulting Obstetrician to the Eastern District Hospital and Dispensary.

Deciduoma malignum is a rare disease. In the fifteen years of the author's practice he has come in contact with only one case. There are still many unsolved problems connected with this subject which can be made clear only by accurate clinical and pathological studies of those cases which now and then come under our notice.

This condition was first described by Sänger in 1888, when, before the Leipsic Obstetrical Society, he reported two "unusual cases of abortion." His investigations at that time led him to designate the growth as deciduoma malignum, deciduoma metastica malignum, describing it as belonging to the sarcoma group with the power of rapidly forming metastases. This

[1]Read before a stated meeting of the Kings Co. Med. Soc.

statement must be qualified by the following: In 1877 Chiari reported cases of malignant neoplasms following parturition, calling them carcinoma, but to Sänger must belong the honor of first describing the condition as a new and separate entity. Since then different observers have reported cases under various titles, for example, deciduoma malignum, chorio-epithelioma, deciduoma cellularis, sarcoma, syncytial carcinoma, etc.

The term deciduoma malignum has been abandoned by some and it seems to be conceded that this growth composed as it is of Langhan's cells and syncytium arises from the foetal ectoderm, but it seems best to the author to still use the older term until further study by those best qualified to speak on the nomenclature of the growth, the pathologists, who can give us a term actually suitable to the condition and thus save a multiplicity of terms.

Teacher in his review of the nomenclature, considers the term "syncytioma" bad, for the reason that while it points to the site it does not refer to the characteristic elements of the tumor. He considers the term chorio-epithelioma the nearest correct from its indication of the origin of the growth, but he also thinks that the term deciduoma malignum should be retained as a clinical name.

When it comes to asking the pathologist to act as a deciding factor as to whether or not a radical operation should be performed, he, quoting from Schmauch, is placed in a peculiar position in considering these particular growths. Changes in the structure and the arrangement of the epithelium, new formation of glands in the uterine mucosa, at times force him to point out his suspicion of malignancy to the clinician, but the deciding factor in such suspicious cases rests with the clinical observer. Similar phenomena are observed in the glands of uterine and cervical polyps. Although the pedicle shows normal structures, the polyp is often described as carcinomatous. This diagnosis is, to say the least, hasty. Such a polyp is, on account of its location, subjected to all kinds of insults; mechanical and chemical, which might possibly produce such suspicious changes in the glands.

The pathology is placed in the same position of all those proliferations which originate under the cell-covering of the villi which might develop a chorio-epithelioma malignum. Many probably will maintain that the mere suspicion of such a growth should be sufficient indication for the removal of the diseased organs. The number of cases of chorio-epithelioma observed is already so large that science is

able in most cases to differentiate between simple chorio-epithelioma proliferations and chorio-epithelioma malignum. The latter is looked upon as a product of pregnancy, foetel epithelioma of the villi covered by this epithelium are constituents of this growth. Both structures, however, are also found in normal pregnancy and its sequelae, and especially after hydatid mole. As far back as 1898, Carl Ruge, in discussing a paper by Veit upon deciduoma malignum pointed out that clinical experience favors us in differentiating a benign and a malignant syncytioma. This statement, it appears, *has not been generally appreciated*. At any rate the literature shows a number of cases of chorio-epithelioma reported by good authors in which an extirpated uterus proved to be normal. Chorio-epithelioma malignum, tending to a fatal issue, possesses many of the features of a malignant growth and is considered such. Its cells have a highly invading and destructive power, but, like other malignant growths, it presents rapid self-destruction. The malignancy is also proved by the strong tendency to produce metastases. It is the fundamental change of biological character which stamps malignancy upon the carcinoma cell.

It was formerly supposed to be due to the degenerative changes resulting from a

mole pregnancy. Later investigations, however, have shown that the mole is not a necessary factor in its development. It follows a normal labor, abortion, ectopic gestation or a hydatid mole. It has also occurred during a pregnancy. A woman suffering from this condition will present a history similar to the following. From a few weeks to months after the termination of some one of the forms of pregnancy, there will be repeated genital hemorrhages increasing in severity.

"The hemorrhages will not be characteristic of mere menorrhagia for the flow depends upon the invasion of blood vessels by cells comparable to those of any malignant process, with perhaps the most rapid spreading of any form of such growths." (Stone).

These hemorrhages cause marked anaemia, the clinical appearance of the anaemia being that of a pernicious anaemia. There will be a watery discharge, sometimes offensive. If the uterus is curetted a varying quantity of soft grumous material is removed but the curette gives but temporary relief, the hemorrhage soon returns. The diagnosis, therefore, if you are on the watch for the condition, is easily made and should be confirmed by the pathological findings. You have as a summary:

1. The history of some form of pregnancy.

2. Subsequent irregular hemorrhages which are not amenable to ordinary methods of treatment and which recur after repeated curettings.

3. The presence of a dirty, sanguineous discharge during the intervals between the hemorrhages.

4. Anaemia, with rapid loss of flesh and strength, with a cachectic appearance.

5. Symptoms due to the metastatic deposits.

6. A pulse characteristic of anaemia.

7. Pain.

8. Fever not unusual.

9. The physical findings in the pelvis.

Uterus usually enlarged, with os patulous. When it is patulous, as it is in advanced cases, the exploring finger finds the characteristic soft nodules. The mortality rate is very high whether operated upon or not, although not as high as in former years, due to the fact of its earlier recognition followed by prompt operative measures. The only treatment is complete extirpation of the uterus as soon as the diagnosis is made, and this should be done even in the suspected presence of metastatic deposits. Veit has reported cases in which symptoms of secondary deposits have disappeared after the primary tumor has been removed.

Undoubtedly many of these cases go unrecognized but those of us who attend obstetrical cases should add to our list of the risks of maternity the condition described above.

Report of Case: R. N., admitted July 2nd, 1909. Native of Russia, married 12 years. Had four children. One child died in early infancy of malnutrition. History of one probable miscarriage given by the patient.

One month before admission to the author's service at the Jewish Hospital, this patient had been treated in another institution in this Borough for two weeks. The patient had previously been curetted at home for uterine hemorrhage. She had remained in the hospital for two weeks and was treated locally and medically. The surgeon on service in that institution was kind enough to give me the following history. The patient was admitted and discharged as a case of spontaneous abortion. At the time of discharge from the hospital hemorrhage had ceased, the cervix was almost closed, uterus was of normal size, retroverted and the adnexa normal. They had obtained the following history previous to her admission; that the patient twelve or fourteen days before, thinking herself about three months pregnant, had a sudden hemorrhage from the vagina. She consulted a physician who curetted her. Three days after she was still bleeding and he advised another curettage. On the night before admission she suddenly expelled a foetus and some membranes. Shortly after admission she was given a uterine douche of iodine solution. Some stringy material came away but no placental parti-

cles, expelled a few clots after that but was discharged with the condition as described above.

Her menstrual history on the author's service was as follows: Began at fifteen, regular, lasting three to five days with slight pain which subsided after the flow had commenced. Her last regular menstrual period was March, 1909.

Family History. Father died of cancer of the stomach at the age of 70 years.

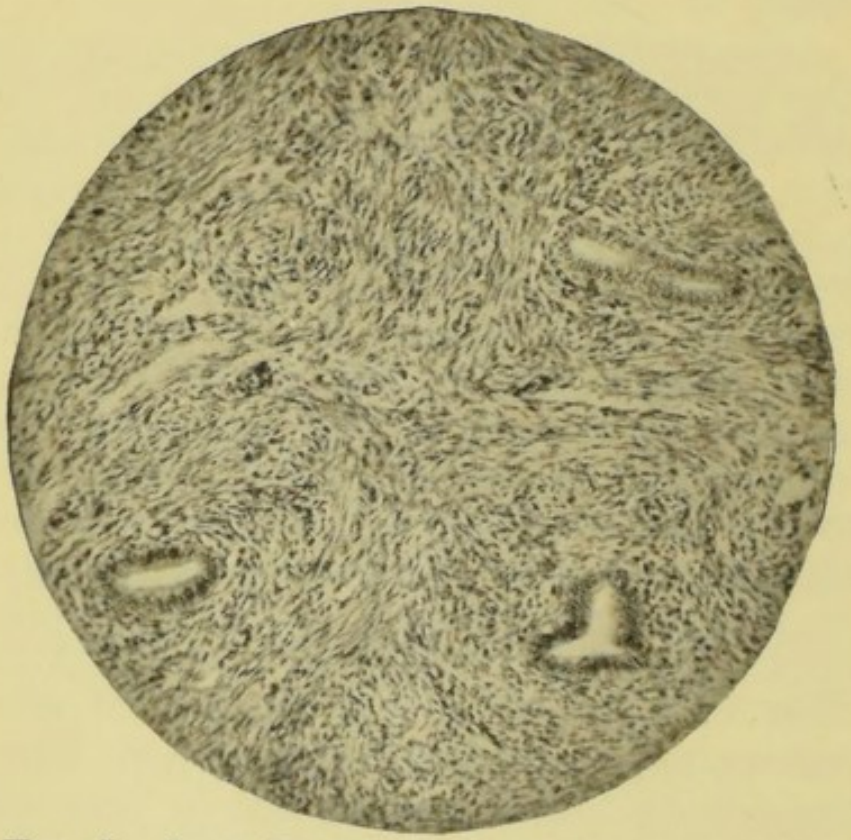

FIG. I. LOW POWER VIEW OF CURETTINGS.

Mother died of dropsy at the age of 69. Has one brother, living and well; has lost nine sisters and three brothers from unknown causes of death.

Entered the hospital with a history of repeated hemorrhages for last eight weeks; appetite poor, slight diarrhoea, increased frequency of micturition; fairly well nourished, but extremely anaemic. Heart and lungs negative. Abdomen protuber-

ant and relaxed. Umbilical hernia admitting end of middle finger. Vagina relaxed with gauze presenting in vulva. After removal of the gauze there was considerable relaxation at the vaginal outlet with a rectocele. Cervix points downward and backward. Uterus slightly enlarged, soft, retroverted to a second degree. Right fornix empty. Left fornix, considerable thickening at the base of broad ligament.

July 10th, 1909, perineorrhaphy and curettage.

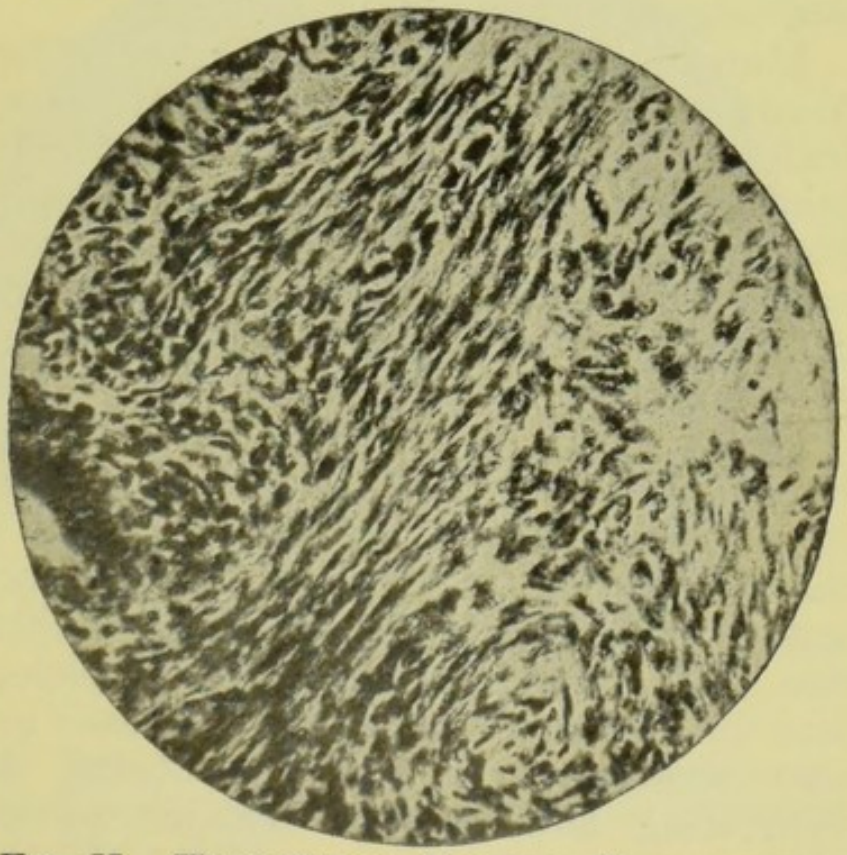

FIG. II. HIGH POWER VIEW OF CURETTINGS.

Pathologist reported that curettings showed small spindle celled sarcoma.

Results of the blood examination were as follows:

On July 8th, leucocytes 12,000, polymorphonuclears 65; July 16th, erythrocytes 3,200,000, leucocytes 14,000, hemoglobin 55%, polymorphonuclears 56; on the 30th the hemoglobin was 70%; on Aug. 7th, erythrocytes, 3,800,000, leucocytes 9,000,

hemoglobin 75%, polymorphonuclears 62; on Aug. 16th, hemoglobin 80%; Aug. 19th, erythrocytes, 3,500,000, leucocytes, 8,800 hemoglobin 70%, polymorphonuclears 58.

On July 20th a pan hysterectomy was done, and the patient was discharged from the hospital recovered, with the exception of considerable anaemia.

The following is the report of the pathologist of the tissue submitted for examination, for which work and the microphotographs I am indebted to Dr. S. R. Blatteis, pathologist to the Jewish Hospital.

Plates I and II. Curettings: More abundant than usual, showing microscopically the glandular elements much diminished in number and atrophied while the interglandular tissue exhibited a most active proliferation, bundles of small spindle cells running in all directions with blood spaces between them.

One piece of tissue consisted mainly of irregular large epithelial cells, imbedded in a homogeneous protoplasmic mass in the substance of which were large blood spaces and evidence of round cell infiltration. This piece of tissue while suspicious was insufficient for a definite diagnosis and was considered for the time being degenerating and necrotic remains of decidua.

Uterus. Larger than normal with the lower segment and cervix hypertrophied while the upper segment including the fundus presented on its inner surface a somewhat granular irregular appearance; its consistency was very friable. On section the same condition was present throughout the thickness of the wall of that part of the uterus.

Plate III. Microscopically are seen uterine muscle fibres in all stages of fragmentation and degeneration caused by the infiltration of larger and smaller protoplasmic masses containing irregular nuclei with no distinct cell body producing a picture closely resembling the large giant cells of sarcoma; this corresponds to the description of the syncytium.

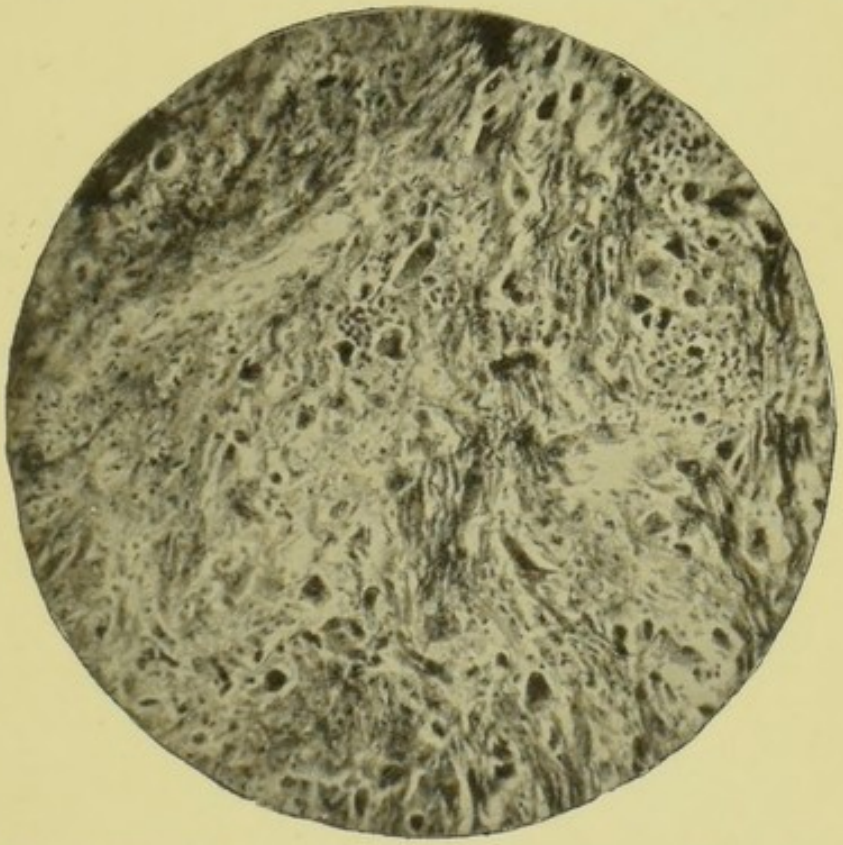

FIG. III. HIGH POWER VIEW OF DECIDUOMA MALIGNUM SECTION FROM UTERUS REMOVED. AUTHOR'S CASE.

Another type of cell present is that resembling the decidual cells; these are large with a distinct cell body and large nucleus in various stages of mitoses and granulation[1]. Areas of leucocytic and round cell infiltration complete the picture.

375 Grand Avenue.

[1]They occur usually in groups, an occasional group filling in some of the numerous blood spaces. They correspond to the description of the Langhans cells.