Placental polypus / by Alban Doran.

17

PLACENTAL POLYPUS.

BY

ALBAN DORAN, F.R.C.S.,

SURGEON TO THE SAMARITAN FREE HOSPITAL.

Read July 3rd, 1895.

1895

[*From Volume XXXVII of the 'Transactions of the Obstetrical Society of London.'*] f. 229

LONDON:

PRINTED BY ADLARD AND SON,

BARTHOLOMEW CLOSE, E.C., AND 20, HANOVER SQUARE, W.

1895.

PLACENTAL POLYPUS.

By Alban Doran, F.R.C.S.,
SURGEON TO THE SAMARITAN FREE HOSPITAL.

(Received May 21st, 1895.)

(*Abstract.*)

The author, in examining the clots from tubes which he has recently removed in cases of suspected tubal gestation, compared the clots with sections of true placenta, and of retained placental fragments. He also examined, for the second time, sections from a polypoid growth found in the uterus of a woman aged twenty-nine, who died many years ago after the removal of a cystic kidney by Sir Spencer Wells. There had been no hæmorrhages; in fact, the patient believed that she was pregnant on account of the absence, for several months, of menstruation. The uterus, with the polypus attached to its wall, and the ovaries showing a large corpus luteum on one side, are preserved in the Museum of the College of Surgeons (No. 4659, Pathological Series). In 1877 Mr. Doran believed that the polypus was a cavernous angioma. Dr. Boldt has, it must be noted, quite recently detected a tumour of that kind in the uterus. The College specimen, however, proved on careful examination to be made up of placental tissue. It is a true placental polypus. In all other recorded cases uterine hæmorrhage was present. The author dwells on recent opinions concerning placental polypus. According to the recent researches of Klasson of Kieff, and Lejars and Lévi of Paris, the so-called "fibrinous polypus" is only a form of placental polypus, if not identical, the placental tissue having been overlooked. The author finally refers to Hartmann and Toupet's important investigations on the results of retention of placental tissue when, instead of septic changes, organisation occurs. They find that this tissue may develop into innocent deciduoma (that is, placental polypus),

hydatidiform mole, and chorion-celled sarcoma. This last growth is the "malignant deciduoma," or cancer following gestation, which has been so frequently described of late, on indisputable evidence, by Continental authorities. Mr. Doran asks why, if this grave disease be so frequent in Europe, it has hitherto escaped the notice of British teachers and practitioners.

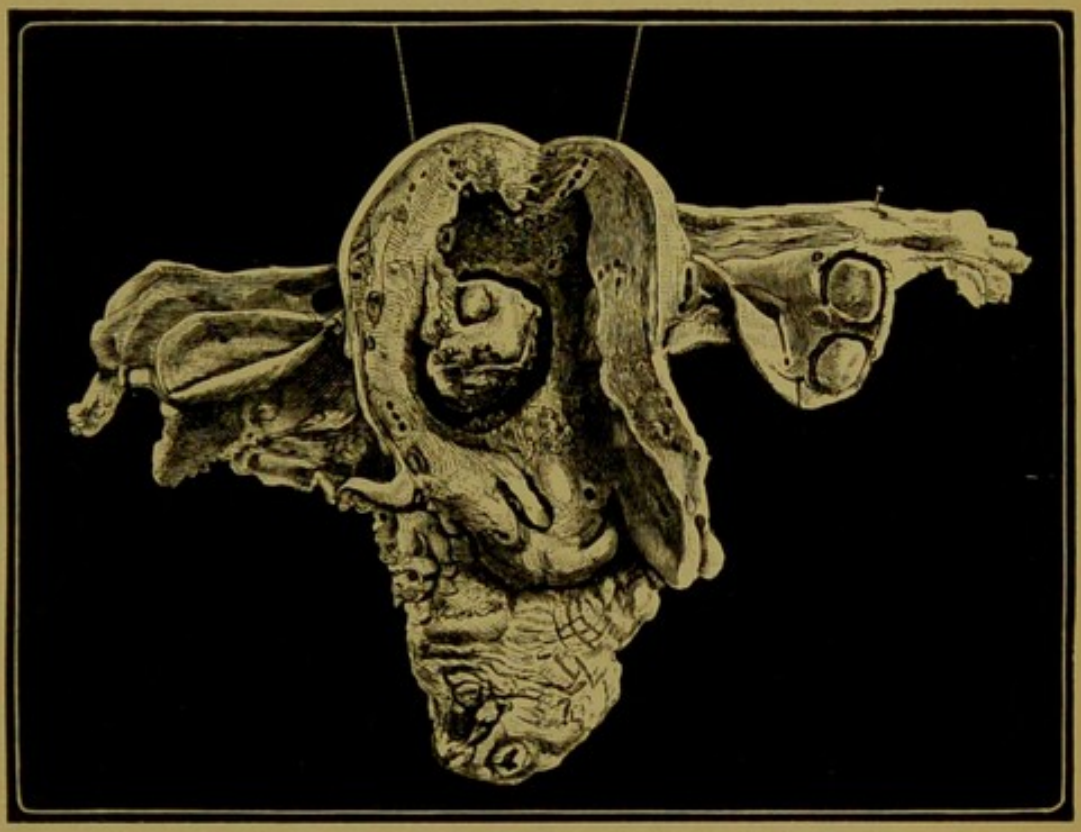
I HAVE recently operated upon a considerable number of patients where tubal pregnancy was either evident or strongly suspected. I have carefully submitted the diseased tubes and coagula to microscopic examination, in order to search for chorionic villi and placental tissue. When pursuing these investigations I inspected sections of clot from cases where a fœtus was found, and sections of the placental tissue. In the course of this undertaking my thoughts turned to a remarkable specimen which I prepared as long ago as 1877; it is now preserved in the Pathological Collection, No. 4659,* Museum of the Royal College of Surgeons, and I exhibit it this evening. I believe the growth, which occupies part of the interior of the uterus, to be a placental polypus, though I misinterpreted its nature in 1877, when I had little special experience of the pathology of the female organs.

The clinical history is as follows:—M. R—, aged 29, was admitted into the Samaritan Free Hospital in October, 1877. A large fluctuating tumour distended the abdomen and was diagnosed as an ovarian cyst. She had been several times pregnant, and aborted very frequently. She believed, when admitted, that she was pregnant. There were no symptoms of disease of the urinary organs.

On October 31st, 1877, Sir Spencer Wells operated. The tumour proved to be a left hydronephrosis, containing

* In the Catalogue the words "From the same case as the large cystic kidney, No. 3557," convey a wrong impression; the kidney so numbered was removed ten years earlier from another patient. The clinical note to 4659 and the reference appended to it are, on the other hand, correct (see 'Descriptive Catalogue of the Pathological Specimens contained in the Museum of the Royal College of Surgeons of England,' 2nd edit., vol. iv, 1885).

six to eight pints of a fluid resembling urine. The uterus rose above the pubes, and appeared as though it contained a fœtus. The patient died of septicæmia on November 4th.

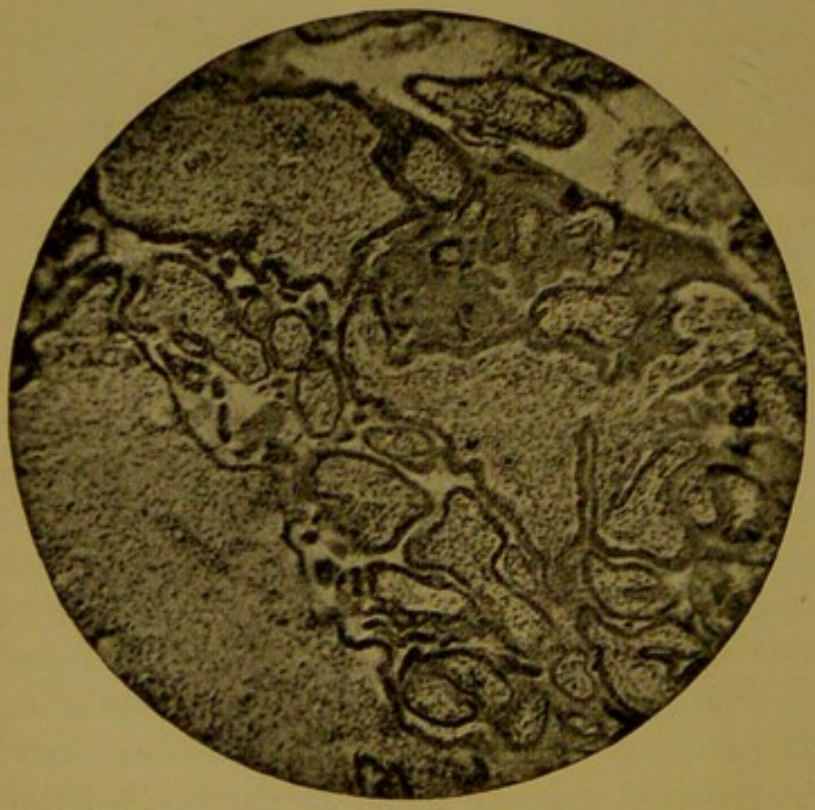


Pedunculated placental polypus occupying part of the cavity of the uterus. The right ovary contains a large corpus luteum of pregnancy (Museum R.C.S., Pathol. Ser., No. 4659). The morbid growth, which had been cut open in order to procure sections for the microscope, has been placed so as to assume its original appearance.

In those days I made post-mortem examinations on patients who died in the Samaritan Hospital. I was begged, in this case, to be very careful in opening the uterus. I found the right kidney and ureter both dilated. There was pus in the peritoneum. The right ovary contained a well-formed corpus luteum of about the third month (I compared it with Dalton's well-known drawings). The uterus was of the size usual at the end of the third month of pregnancy. On opening it I found no fœtus. A soft and vascular tumour of the size of a filbert was

attached by a broad and fairly distinct peduncle to the left side of the uterine wall close to the cornu. The peduncle appeared entirely composed of uterine muscular tissue. It seemed to me at the time that the mucous membrane of the uterus was reflected over the tumour, and between them were two or three old and recent clots.

The reflection of mucous membrane was a false appearance; the clots were an important feature to which further reference will be made. On microscopical examination the growth seemed to be composed of small round cells in a very scanty stroma, "with numerous blood-vessels." I regret to say that I described the appearances in the words just quoted in the Pathological Catalogue. I drew a sketch of the section, and I now see that two large U-shaped chorionic villi in the sketch preserved in the College were, perhaps naturally, mistaken by me for coils of vessels. The microscopic photograph which I exhibited by limelight at the June meeting was



Placental polypus (Mus. R. C. S., Pathol. Ser., No. 4659), microscopic section (Beck, ½ inch) showing placental tissue.

(Trans. Obst. Soc. Vol 37, p 207 – shown by Limelight with Dr Eden's sections illustrating "The Development & Intimate Structure of the Human Placenta")

prepared for me by Mr. Edmund Roughton and Mr. C. Cosens, who also made the print of the same section which I now present for inspection. The appearances which it faithfully represents should be borne in mind, for in cases of the disease known as malignant deciduoma, of which something will presently be said, precisely similar tissue has been detected in metastatic deposits, even in the lungs.

I had recently seen cases of cavernous angioma in St. Bartholomew's and King's College Hospitals, and I thought that this specimen might be a tumour of that class. In editing the 'Pathological Catalogue' Sir James Paget, Dr. Goodhart, and myself, however, objected to hide behind big names when we were uncertain of the nature of any specimen in the collection. Strange to say, I find that in Keating and Coe's 'Clinical Gynæcology, Medical and Surgical, by American Teachers,' published only last month, Dr. Boldt describes and figures a case of cavernous angioma of the uterus. The patient was a nullipara aged thirty-seven. She had suffered for nearly a year from profuse uterine hæmorrhages, and, as the curette and other treatment had failed to do good, the uterus was removed. A tumour, as big as a walnut, was found in the anterior and upper part of the uterus. It was sessile, and protruded into the uterine cavity, also extending halfway through the thickness of the wall. It was deep red and firmer than the surrounding tissue. On careful microscopical examination Dr. Boldt discovered the characteristic appearances of cavernous angioma.

Had Dr. Boldt's case occurred before 1877 I might have been further misled. For several years I have suspected that my first interpretation of the case was incorrect. Mr. Targett has very carefully prepared some fine sections of this pedunculated growth. I exhibit a section this evening. This time my opinion, or rather suspicion, proved correct. Mr. Targett writes, "The polypus is composed of typical placental tissue and nothing more, as far as I can see."

The growth must be classed as a placental polypus. Much has been written on this subject. Dr. Klasson,* of Kieff, Russia, compiled an important summary of opinions on placental polypus six years ago. Fibrinous and placental polypi were considered, as well as growths derived from the decidua and the chorion.

Fibrinous polypi have often been described. They are closely related to placental polypus. According to Klasson's definition, they are formed out of clots which accumulate on the thrombus which obliterates the uterine sinuses after delivery or earlier. These thrombi project, after expulsion of the fœtus and placenta, into the uterine cavity, persisting sometimes, it is said, for several months. If so they afford time enough for other changes. But Cohnstein and Charpentier, as Klasson observes, have already pointed out that the clot in a "fibrinous polypus" may have been originally deposited on a piece of decidua or placenta. Matthews Duncan, long before the two authorities just named, wrote: † "A fibrinous polypus is a false polypus. It occurs after delivery or abortion, is of considerable size, as of an egg, is generally lying in the cervix and broadly attached to the placental site by a thick neck, scarcely a stalk. At its attachment chorionic structures in small quantity are generally found, and the mass of the polypus is formed of blood. This polypus is firm enough to retain its shape when removed by avulsion. On examination its outer surface is formed of a thick yellow fibrinous layer, and inside is a dark, firm blood-clot. It behaves and is treated as a polypus, and is not very rare."

Let it be remembered that the same great authority, our late President, writes just before the above quotation, "A bit of placenta, partially adherent, hanging by a stalk, is called a placental polypus."

Thus Matthews Duncan admitted the existence of pla-

* "Contribution à l'étude des faux polypes de l'utérus," 'Annales de Gynécologie et d'Obstétrique,' vol. xxxi, 1889, p. 105.

† 'Clinical Lectures on the Diseases of Women,' 3rd edit., 1886, p. 199.

cental polypus, and also believed in "fibrinous polypus." He, however, brings forward no evidence based on microscopical research. In the specimen which I exhibit it must be remembered that when it was fresh, and I was quite unprejudiced about distinctions between placental and fibrinous polypi, I noted that there were old and recent clots on the surface of the polypoid growth. That which I described as "the mucous membrane of the uterus reflected over the tumour" was simply a layer of organised clot.

Returning to Klasson, I find that the difference between a fibrinous polypus and a placental polypus is but a matter of degree when the growth is simply clot deposited on a piece of adherent placenta. If the pedicle alone be composed of placental tissue the growth is a fibrinous polypus, whilst Klasson would rightly term it a placental polypus if "the bulk of the polypoid growth be formed of placental tissue covered superficially with a layer of fibrin." This latter condition was to be seen in my specimen when it was fresh.

Quite recently, however, two French writers, Lejars and Lévi,* on examining a so-called fibrinous polypus, have come to the conclusion that the term should be abolished. They believe that all so-called "fibrinous" are placental polypi. Their patient was thirty-seven. She had a fall on September 10th, 1893, when four months pregnant, and aborted. The period did not reappear. Early in January, 1894, a fœtid red discharge was observed; it was followed by menorrhagia for a month. The cervix was thick, irregular, and hard. It bled on the least touch, and the blood seemed fœtid. The uterus was moveable, but there was deposit in the fornices. The patient was emaciated.

Cancer was therefore suspected, and on February 3rd, 1894, the uterus was removed by vaginal hysterectomy.

* "Polype placentaire intra-uterin d'apparence fibrineuse," Report of meeting of the Société Anatomique de Paris, 'Annales de Gynécol. et d'Obstét.,' April, 1895 (vol. xliii, p. 324).

On opening that organ, a polypus one inch long was found springing from the inner wall posteriorly, close to the left cornu. It looked like a piece of fibrin. MM. Lejars and Lévi examined sections under the microscope. The tissue was found to be "purely and clearly placental;" —this is the same report as Mr. Targett made of sections from my specimen. These investigators dwell, after the report, on the fact that the microscope has not hitherto been sufficiently used. The so-called fibrinous polypus is not, as Kiwisch made out, a degeneration of the uterine wall; nor is it, as Scanzoni maintained, a change in the entire ovum analogous to a mole. It is, Lejars and Lévi insist, simply a form of placental polypus.

Klasson discusses ably enough the pathology of placental polypus as understood in 1889. "These polypi are the result of incomplete delivery of the afterbirth, fragments of placenta being left in the uterus." Retained portions of placenta are frequent in abortions after the third month, also after labour at term when the placenta is extracted manually. They are not unknown after natural delivery. The question of simple retention of fragments of placenta is well known to Fellows of our Society. Klasson admits that the limit between simple retention of placenta and placental polypus is "very difficult to define." But in my specimen the structure is clearly polypoid. This development of a distinct pedicle is, thinks Klasson, "a matter of time."

Klasson then describes a case. The patient was twenty-four, confined three years before observation. She became pregnant in April (1888?). A week's free flooding in June ended in expulsion of a three months fœtus on June 23rd. A fortnight later there was free show, then uterine colic. On July 21st she called in the doctor. The fundus extended four fingers' breadth above the pubes. The cervix was found much dilated. A lobular mass, resembling placenta, was detected in the uterine cavity. At the fundus the mass adhered to the uterine wall by a broad base. It was partially detached

by the finger, and next day removed by the curette. It was found to be placental tissue.

The placental tissue seemed, in bulk, out of relation to the stage which the pregnancy had reached when abortion occurred. Hence Dr. Klasson believes that it continued to grow during the twenty-nine days that it remained in the uterus, owing to its intimate connection with the wall of that organ. Delore* believes that in blighted ova the villi increase for a time, at least they grow larger through œdema ; and that change, Dr. Klasson thinks, must have occurred in the case just recorded.

I have designedly quoted Klasson's opinion about placental tissue growing after the loss of the fœtus. We all know how the placenta seems to increase in size in cases of extra-uterine pregnancy where the fœtus has been retained beyond term. Unlike Delore, who qualifies his assertion that the villi increase, some writers speak as though the essential tissue of the retained placenta really grew. Clarence Webster,† however, shows that this growth of placenta is neither hypertrophy, hyperplasia, nor simple continued growth of the essential placental elements.

"That correct observations have been made in many instances as to the *increase in size of the placenta* after the death of the fœtus, or its removal by operation, cannot be disputed. The explanation of the increase as being *due to growth is the mistake that has been made.* The change in the size of the placenta is due not to growth of its tissue, but to extravasations of maternal blood, varying in size and number, which alter the continuity of the villi and their relations to one another."

As with the retained placenta in advanced ectopic gestation, so it usually is with the retained placental tissue in a placental polypus. The sections in my specimen show villi, but they are degenerate, like the villi we

* Article "Placenta," 'Dictionnaire encyclopéd. des sciences médicales.'

† 'Ectopic Pregnancy: its Etiology, Classification, Embryology, Diagnosis, and Treatment,' 1895, p. 102. (The italics in the quotation are the author's.)

so often find in hæmatosalpinx from ectopic gestation. As I said at the beginning, it was when working at the latter subject that I investigated this specimen which seemed so suspicious.

Before I discuss the precise pathological meaning of a non-septic placental relic in the uterus, I must note that in Klasson's case a fortnight elapsed between the abortion and the onset of the first attack of hæmorrhage. In the case which forms the basis of this paper there had been amenorrhœa for several months, and the patient thought herself pregnant. The operator dreaded that abortion might follow the removal of the cyst. No show was seen during the five days that she survived.

Thus my case is exceptional, for all the cases collected by the industry of Dr. Klasson seemed to be accompanied by uterine hæmorrhage, as in retained placenta which does not assume polypoid characters, but becomes septic or otherwise troublesome. The absence of "show" for a fortnight is noted by Klasson as something remarkable. Why it did not occur in my case seems uncertain.

In conclusion, is a placental polypus an innocent growth? Clinically, no; it is a noxious element out of place amidst normal uterine tissues. MM. Hartmann and Toupet* draw an instructive picture of the dangers of non-septic fragments of placenta left in the uterus.† Though in these simple placental polypi the essential tissue does not really increase, it may do so in some cases. The polypus then becomes an "innocent deciduoma." The authors describe a case where there was flooding, as usual. They imply that all these polypi may be "deciduoma"—a theory not absolutely proved. They

* "Des consequences tardives de la rétention partielle ou totale du placenta (endométrite déciduale hémorrhagique; placenta scléreux; déciduome bénin; mole hydatiforme; sarcome-chorio-cellulaire)," 'Annales de Gynéc. et d'Obstét.,' vol. xliii (April, 1895), p. 285.

† Perhaps the diffusion of antiseptic midwifery may increase the frequency of absence of septic changes in the retained fragments, which thus may have a chance of organising. As, however, placental polypi existed before antiseptics this theory is hardly conclusive.

then speak of a very important disease which, it seems, has not yet reached our shores. Mr. Bland Sutton and myself have examined numerous uteri, but we have never made out this new disease, and neither our present President nor any other obstetrician of mark whom I have consulted has observed any cases, yet several Continental writers describe it minutely. I refer to malignant deciduoma,—clinically speaking, cancer of the uterus following labour. In 1894 Menge gave an excellent summary of the literature of this grave disease.* Klien† relates a case where this malignant change followed hydatidiform mole. Hartmann and Toupet insist on not holding that well-known disease guiltless of malignant tendencies. The habit which the vesicles have of occasionally burrowing into the uterine wall and perforating it is possibly an indication of something worse than mere mechanical pressure.

Fortunately we know well enough that a placental polypus requires one kind of treatment, and that is removal. The curette ought to be applied to its root, else worse may follow. I should like to hear what the Obstetrical Society has to say about malignant deciduoma. The only case which has been observed out of continental Europe is somewhat doubtful. It is described by Dr. Boldt (*loc. cit.*, p. 597): "A woman, aged 33 years, had aborted about the fourth month. Shortly after abortion sanguineous discharges again occurred, and she was curetted by her family physician, under the impression that placental remnants were left *in utero*. When seen by me about four months subsequently the uterus was greatly enlarged, and the patient anæmic. An examination of the débris resulted in the diagnosis of a peculiar form of sarcoma. The patient died a few months subsequently of asthenia, pleurisy with effusion having taken place. Unfortunately no post-mortem was permitted." I can find no other original observations on malignant

* 'Zeitschrift f. Geburtsh. u. Gynäk.,' vol. xxx, pt. 2.

† 'Archiv f. Gynäk.,' vol. xlvii, p. 243.

deciduoma written in the English language, excepting a valuable monograph by Bacon, of Chicago.*

[Since the reading of this paper I find that Dr. Whitridge Williams, of Baltimore, reported in the June number of the 'American Gynecological and Obstetrical Journal,' a case of deciduoma malignum under his own observation. The patient died within three months after labour, and there were abundant metastatic deposits in each lung.]

* "A Case of Deciduoma Malignum: a Contribution to the Study of Malignant Tumours composed of Placental Tissue," 'Amer. Journ. Obstet.,' May, 1895, p. 679. The case occurred in Prague, not in America. All the twenty cases in Dr. Bacon's valuable statistical tables were observed in continental Europe.

Péraire "Tumeur ulcérée du fond de l'utérus" "Bulletins de la Soc. Anat. de Paris Mars 1909, p. 149. ♀ 34½ no sexual history. Incessant haemorrhages 2 yrs. A flabby, fluffy deep red ulcerated polypus, the size of the [illegible] removed. Uterus removed, recovery. The exam. of the polypus: it seems like my specimen.