Carcinoma of the Uterus

Of the malignant growths affecting the Uterus Carcinoma is the one demanding chief study. It occurs in women generally of a somewhat advanced age, though also in this younger years, and is met with in practice as a disease of the mucous membrane of the Uterus. It is characterized by a well known series of symptoms—bleeding, discharge, pain, cachexia— and besides making rapid progress as a disease, puts an end to the life of the sufferer in a few years. It fortunately however cannot be said to be a disease of common occurrence, perhaps its frequency might be stated at about 2½% of uterine diseases. It is not influenced by the fact of the woman having brought forth children. There are two chief forms of the disease recognized. First, a distinct tumour formation with well marked external configuration, as exemplified for instance in the Cabbage-flower like appearance put on. Before long however great destruction of the surface skin, the disease appears in the form of an ulcerated surface, something like a Redent Mark in more distant parts of the body, but very rare. Carcinous Changes have taken place in the uterine tissues. Carcinous growths are set up in various situations of the Uterus. It is best not most accurate to take the three divisions of the organ as the marks of growth—the body (Corpus Uteri), the neck (Cervix Uteri), and the vaginal portion (Portio Vaginalis Uteri). Carcinoma is found in these three situations, and occurs as Primary or Secondary. Secondary Cancer is usually constructed on the type of the tumour from which it has spread, and this is no special interest in studying it as occurring in the Uterus. Primary Carcinoma has a new and characteristic construction of its own, and it is found in the various situations of the Uterus named. It is found to be greatest...
accrualtence in the Cervix and here it is very often an ex- 
\"tension from the Cervix,\" if not else from the vaginal portion.
\"I shall confine my attention to the study of primary Cancer as 
\"found in the cervix and Ports. As described in books on 
\"Carcinomas of the Ports and of the Uterus - the flat 
\"and the Cylindrical-like epithelial Cancers - of the Cervix, it 
\"glandular Cancers, i.e., the former, the epithelium of the 
\"cervical canal, and of the glands, does not participate in the 
\"setting up of the disease, \"in the latter it is essential, and the 
\"gland being cylindrical it is termed Cylindrical epithelium. 
\"Various authorities differ as regards to the pathological 
\"anatomy of the Cancers under consideration. But before going 
\"on to the different views and opinions it would be well to 
\"glance at the two prime factors: 1. the normal structure of 
\"the parks which become diseased, 2. what Carcinoma essen- 
\"tially is. The histological structure of the organ is best 
\"followed in the diagram. The uterus (Body and Cervix) is 
\"related with mucous membrane down to the external os. 
\"There is no submucosa. The connective tissue between 
\"the mucous membrane and muscle wall is divided into 
\"1. a layer in relation to itself, and the other in relation to the 
\"muscle. The mucous membrane is full of glands down to the external 
\"as their essential element being Cylindrical epithelium. 
\"That of the Body is Ciliated. The glands open on the its Surface 
\"where their secretion is poured out. The mucous mem- 
\"brane of the Ports Vaginalis has no glands, and is quite 
\"Cylindrical epithelium. It has vascular papillae covered 
\"with stratified squamous epithelium.

Carcinoma is essentially a marked increase of Epithelial 
\"cells, to which there is no limit - a new structure is built 
\"up - this generally on a free surface - the new growth 
\"rapidly spreads and destroys the surrounding tissue being 
\"invaded by its extension. The Cancer of the tumour is 
\"malignant. Adenoma which occurs as a non-
\"malignant though marked increase of Epithelial cells, in the 
\"form of glands (functionless glands) is also readily 
\"
Chances into Carcinoma. There is ample epithelial
element in the uterus for it originating and building up. Cancer
Gynaeologically the disease presents itself as a Carcinoma
where the mucous membrane of the uterus is infiltrated
with nodules. In treating the disease therapeutically
the gynecologist has usually to resort to his extreme method
of operation with one hand or total extirpation on the
other for radical cure. The diagnosis is most accurately
arrived at not by symptoms but examining a piece of
the diseased growth under the microscope. In this particula-
the gynecologist must be master of the pathology of Carcinoma
and he must also know its exact origin and how far it is likely
to have spread.

Wagner (Citation: med. Jahrbucher 1877 p. 5) says "the
inner layer of the uterus alone become by phenomena similar
the outer sections

Neit (Strahlungen der Weibchen Geschlechtsorganen 2 Aufl.
Spez. 9) say it is a diffuse infiltration in the form of Plates.
Great abundance of masses are formed in it walls get
Worms.

Simpson (Scheiders Obstetricial & Gynecological Works 2 Ed.
1871) give three different forms 1 st a more superficial
rounded with spongy carcinoma 2 nd Simple Carcinoma
scabbing & 3rd massive infiltration with wall
with participation of the Cavity.

Cannan (Traite Pratique des maladies de l'Uterus
Paris 1872 p. 1852) "as double arise from the mucous
membrane but also appears in the parenchyma of the organ
and within serous or Wucherstoff Cancer which
Trench with surface. He is not sure about a fibroid going
over into Carcinoma.

Klebs (Handbuch der Pathologische Anatomie. 1873
S. 7. 869 ff. "The forms of Carcinoma are developed out
of polypus or from the rich in glands. " By the mentions is

(1873)
organ they hang out of it Cavity from its bare surface
of these forms extend upwards it is corpus Clue 9. Deh
bends then infiltration of the vagina. nodules are found
in it muscle will go from this region of the inner os and
can affect all parts at the same time

Schröder in the latest edition of his book on Urine
Diseases allows that "a broad base polypus go at from
its mucous membrane but they very little diffuse in
filtration of the mucosa" He doubts the primary devel
opment from module

Wegelius states the same view

Gussevina teaches that it infiltrates very parame
ters forms an rent Common it just turns
grounded nodules becomes built up in the Urine
Substances. It differs from fibroid a being smooth in
the surface according to how the mucous membrane
touch Carcinomas though she describes poly fre
Urino growth going out from glands as growing into
the Cavity
When this great unanimity of opinion as to how Cancer is set up in the Abdomen, arises, anatomically, one can in
variable recognize the spongy membrane as taking part in its
development. It would seem from the definition of Carcinoma
that it has always to do with the Epithelial elements alone but
then are Connective tissue elements found in every Carcinomatous
Tumor and their play an important role in its growth. Many authors, from Rotch to von Mering in
his Lehrbuch der Geschwulstlehre 1850, have believed in the Connective tissue to some origin of it. Dr. Hlubisch
(Res. medizin. Abhandl. fuer Pathologie, 1875) long ago laid down that
Carcinomatous cells take their origin in Connective tissue
and in Allman's Pathologie fur Anfanger 5th Ed. 427 ff, 477 ff,
the author plainly says "in the connective tissue of the cysts, arising which are filled with cells
epithelial character and having no connective tissue
within it. There is a stage in which one cannot be
decided - whether a simple growth going on or a development
in a polyp-like and connective form. The great proportion
are not of Connective tissue of the parts equivalent to it
do that the beginning for all are the same.

While Rokitansky & Billroth laid down that it is a
connective tissue infiltration that they main-
tain Epithelial cells must have grown out of Epithel-
ium. Therefore, the author cannot arise from surface skin
but must grow out of Epithelium.

Wagner (1858) talks of the view of Mesoblast that
Cancer springs out of glands that in the Connective tissue origin
and that in the throat beneath its muscle fibers
one finds connective tissue membranes.

The Cancer grows through these connective
tissue, growing out of Connective tissue. This is the case
with Alveolar bone of Oroschek's
Wagner found in the breast of change all manner of transitions
and develop connective tissue to the mother cell with many nuclei.
The cases described showing cancer going out from mucous membrane are not many.

Hale (Pathol. Anatomy, vol. 2, pp. 156, 157). He says that if the curet makes the transition tissue and holds the papillary tumour to the preparing stage of cancer. Ferguson (Archives, 4th. Ser. 67, 5, 131.) allows the surgeon to remove the cancer at any stage to prevent the epithelium. He wished to establish a transition between carcinoma and sarcoma. Thus the carcinoma gets epithelial cell theory origin must fail through.

Seidensticker (Archiv f. Pathol. 6, 150.) speaking of psoriasis gets tongue and bone mucous membrane in its relation to carcinoma, refers to above and says: "It is a different cell, the new formed tissue with tongue and bone mucous membrane. After that the epithelium is before they reach their ultimate development and before they get to surface. Thus he finds carcinoma out of transition tissue, the does not prove to demonstrate a direct connection between it carcinoma and its original epithelial structure. What he has thought about is the progression of the deep from epithelial septum.

Further according to him, carcinoma means that the process away from the surface, and under it get to transitory epithelial cells with very place to epithelium, in the disease being normal.

Billroth, Celsin, in 1893, 1866, does not agree with these views. As regard to the question, where does the carcinoma begin and where the adenoma, he says: "It is carcinoma where there is a great infiltration of cells leading to the connective tissue cells growth. Where that fails is adenoma. Rudolph, Klein says he believes in the infective theory as a transition from epithelial cell restlessness to connective tissue.

In the parenchymatous connective tissue there is transition from cells which take an epithelial character. There are the sarcomata, and the carcinomata, transitions
but Carcinoma may also go on from pre-existing Epithelium. Mayer accepts before the transition gets cells into Epithelium, there must be a transitional stage from出租车 while Carcinoma also arises out of pre-existing Epithelium.

Opposed to the connective tissue theory, origin there comes essentially as if by proxy, the dogmas “Epithelium is only Epithelium” and “Epidermis is only Epidermis.”

Though in this book points out that Carcinoma may go out from an aberrant embryonic Epidermal layer along with primary glandular Carcinoma. SECOND primary gland Carcinoma as it is called out in the literature is a primary chronic disease, explain as any light, but a primary lymph gland Carcinoma can never exist. In the case of metastasis it is not an infective disease but a transplantation of cells which further develop themselves into Carcinoma.

Waldayer (Vol. I. p. 335. 167) holds all Carcinoma as Epithelial growths. There is no distinction to be made between Carcinoma and Carcinoid. The tumour begins as an hypertrophy of the papillary bodies, and the cells are cases, e.g., Epithelium papillare Ciliado, where the epithelial masses are seen to be found remarkably deeper than the base of the papilla in the skin to secure the diagnosis of Carcinoid.

Waldayer is against the infective theory. Carcinoma is not presented as Epithelium although in the paraehymatous forms in the skin he cannot seem discover the origin. To him also and with regard to the Affection of Carcinoma and Sarcina, there appears to be an indifferent element stage found between the Sarcoma mass in the latter. After hardening in Müller's fluid clinical this is better seen, and you find it containing itself as young epithelium with great round clear nuclei and angular columns. In these cases you can in like manner demonstrated connective and tubular with well formed epithelial cells.

Among gynecologists Opinions are various: Stanzioni has never seen a single case of commencing Carcinoma infiltration yet Carcinoid. There is so rare
Distinction between Carcinoma in its commoner stage and benign inflammatory affections e.g. Chronic Metritis. He has not found Carcinoma occurring as infiltration but much more frequently through other accessory changes especially papillary and Cameron degeneration of the cervix. He holds to the superficial epithelial origin of Carcinoma and lays great stress upon the mucous membrane of the vaginal portion being intact. If there are no affected areas or papillae participating in the growth over and above this is no malignant disease. Hegener (Deichel's Lehrbuch der Inneren Anfaustadion) comes to a like result. Spiegelberg (Archiv f. Gyn. Bd X. 1875 S. 225 ff) lays stress upon the following three points of particular hardness in immortality of the mucous membrane by reaction of the pre-carcinoma.

Gassner (Weissmann's Hefte) says 'Of the Carcinoma, Defeating the most of the uterus Carcinus is the only one found. He explains that the other sorts of Cancer other than this Cancer seldom appear on the surface. Those under an intact mucous membrane as out of glands which have become adenomatous and appear as Carcinous infiltration.'


Gassner is satisfied with clinical observation on the subject but anatomical research cannot be done without. These different authorities thus express very contrary opinions on the origin of Cancer in this region. Those who would seek to combine the practical experience with scientific observation are in favour of the epithelial cell theory. Oester and Krueg in 1882 published a very thorough research upon the subject. Research was made microscopically and otherwise when a large number of cases of Cancer of the uterine cervix were divided into two parts. The first part dealing with a mixed series of cases i.e. taken from various sources.
But all dealing with Primary Cancer of the Uterus. The numbers were 21 cases which came directly under their own observations. 24 cases gathered from classical literature upon the subject.

Cancer of the Uterus was found to occur in women at the average age of 46 years, and thus past the menopause stage. They often complained of a similar series of symptoms, and the uterus was in most cases enlarged and often displaced, e.g., retroflexed. They could recognize in some cases, two chief forms of presenting themselves. The diffuse type, or the polyposes or circumscript.

The former was characterized by a noddy or crusty surface of rather smooth and this kind did not occur very frequently. I.e., the diffuse form was the commonest and it presented a variety of aspects with uterine cavity, the mucous membrane always discolored. The polyposes forms were not broad based in the mucous membrane, there might be found more knotes. In all the cases, on the mucous membrane discolored and the neck of Cancer, in the circumscript form, there might be Carcinomas masses in its muscle wall. But there was no case of Myoma "going on" into Carcinoma. If abnormal growth were found in its substance, it was then by extension. Nearly all the cases at times glandular Carcinoma the malignant growth arose at glands, but it abscised had a glandular build. There were one case of Adenoma malignum in the glands being involved in the Carcinoma growth and the glandular cancer mass could be traced spreading away out from them, not preserving a glandular-like form.

The second part of the work is devoted to a research upon a large number of cases, which came immediately under their own observation. The cases are divided into:

1. Carcin of the Portio \( \text{cases} = 24 \)

2. Carcin \( \text{cases} = 14 \)

With regard to the first group, the Carcin of the Portio \( \text{of} \) they presented all the cauliflower excrecence appearances, and occurred in both anterior and posterior lips of the cervix.
Upon the uteri were more frequently. The origin of the cancer in each case is more especially dealt with and I tabulate shortly the result:

<table>
<thead>
<tr>
<th>Origin</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connective tissue</td>
<td>4</td>
</tr>
<tr>
<td>Glandular</td>
<td>8</td>
</tr>
<tr>
<td>Gland in Erosion tissue</td>
<td>2</td>
</tr>
<tr>
<td>Granulatium tissue</td>
<td>4</td>
</tr>
<tr>
<td>Undecided</td>
<td>2</td>
</tr>
</tbody>
</table>

There is thus every diversity origin for Carcinoma as found in this situation. There are no typical cases of Carcinoma within Carcinosis itself. This would seem to exclude any direct arising out of stratified Squamous Epithelium. Grade of number than cases arise out of Connective Tissue. The orifice uterine is respected, and the Cancer originates in Connective tissue some distance from the surface of the uterine or external orifice of uterus. The change sets in by enlargement of the Tumor cell nuclei, they become great epithelial cells and eventually large cloud of growths are formed. They thus agree with Virchow's 1st number if the Cancer are distinctly out of Epithelium. In the Carcinoma has taken its origin in Epithelial Epithelium of the glands or of the surface, or that which has grown overseas where it may be it has formed also glandular like structure. In a number of the cases the Carcinoma would seem to take its origin distinctly in Erosion tissue and thus brings in the element of inflammation as having somewhat to do with it question. Carcinoma theory that Carcinoma has existed in its cells at the rest of the disease, from their very embryonic existence, is not fully loccated.

There are 114 cases given of Carcinoma, and 77 cases 3 in 12° 2° 11° of the origin in connective tissue. The surface was intact. The remainder were out of glands and designated glandular Carcinoma. One was 7th degree of malignant adenoma. The classification given by this Cancer is:

<table>
<thead>
<tr>
<th>Case</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Connective tissue</td>
</tr>
<tr>
<td>2</td>
<td>Glandular</td>
</tr>
<tr>
<td>3</td>
<td>Gland in Erosion tissue</td>
</tr>
<tr>
<td>4</td>
<td>Granulatium tissue</td>
</tr>
<tr>
<td>5</td>
<td>Undecided</td>
</tr>
</tbody>
</table>
Connective tissue Cancer

1° Stomach Cancer

2° Glandular Cancer

3° Other forms

1° of the malignant adenoma type

2° in which the glandular epithelium of the mucous membrane or in the glands has taken on a squamous transformation, formed by few layers of cells - cell rest - An adenocarcinoma growth thus set up, which spreads away from the surface -

3° Skin Cancer - but the cutaneous structure built up is not of glandular epithelium - Keratin body formations are found - This form is to correct. The first form is also rare.

The origin of Cancer affecting the Portio and Cervix uteri is not settled in the above work.

I come now to the second part of my revised essay.

The microscopic examination of a number of specimens of Carcinoma of the cervix and Portio. First a series of preparations belonging to the pathological Institute at Göttingen. Second a series of preparations prepared for my purposes from Berlin, and specially prepared for microscopic purposes.

(1) The preparations from the pathological collection. It took portions from obviously Carcinous places, hardened them in absolute alcohol 12-24 hours, allowed them to lie 12-48 hours in oil of bergamot or 4-6 in xylol. After embedding in paraffin I made sections, 4x thick, with the microscope. I stained the sections by preference with perlethionine carmine and methyl blue, rarely using hematoxylin. Saffronine R.

My microscope was made by Winkel in Göttingen.
The following is the result of the macroscopic and microscopic examination of first series of specimens:

A papillary growth which had been taken from the cervix uteri, of somewhat warty appearance and conical shape, about 4 cm in length. Microscopically it presented a central stroma with blood vessels. In this neighborhood were many lymphocytes and round cells. The stroma, built of the tumor contained of large epithelial cells growing close together, with distinct nuclei. The processes of the epithelium seen in many places, especially near the stroma. The epithelium grew in the form of papillae and there were beautiful papillary lay in the cell nuclei. These are bright yellow when stained with eosin-staining.

There were a number of glands to be seen and they lay in contact with the epithelial growth. They were lined with beautiful cylindrical epithelium, transparent and there was no change to be observed in any gland cells.

This is an active papillary growth of stratified squamous epithelium into which glands form. The cervix had grown.

No. 2. A specimen called Carcinoma of the cervix and first a portion of external tumor growth. It presents microscopically a central connective tissue stroma as framework with the manner of the diagram, and this is covered with an extensive papillary growth of epithelial cells, but there is no special formation to be seen—no pearl body—and there are no glands.

No. 3. "147" Pathological Collection. It presents the beginning of Carcinoma growth in the Portis Vaginalis. The stroma, quite soft and uncalcified, shows a column which extends around the external surface microscopically. It presents numerous tubuli, various sizes, and in communication with the exterior. They were filled with polymorphous, somewhat elongated cells, somewhat loosely arranged, and adhering by one end to the peripheral wall. These tubuli were found extending under the vaginal mucous membrane, and also into the cervix. There was no porta.
membrane to be seen. The muscle layers were somewhat involved. There was small cell infiltration at many most cells. It is a case of glandular carcinoma where it changes and takes place in the gland - become walled and its epithelium transformed into carcinoma cells. There is no cell nest formation. 124 165. Collet Portio which had been amputated for carcinoma disease no marked external disease Portion mid another in section a portion of an apparently a diseased part. It was dark through blood pigment from the neighboring about 1st. Carcinoma sizes and somewhat lobulated - one about it Igo foa

Consistence same soft

Microscopic exam Portio - There was seen the Portio mucous membrane with vascular papillae as normal epithelium submucous tissue surrounded by many rounded blood vessels often with blood clots. At the neighborhood of the external surface a number of gland tubules found. These containing somewhat elongated irregular shaped large cells loosely arranged but often adhering to the periphery wall. In some places within glands with normal epithelium or one or two sides and with remaining parts the transition into carcinoma cells was well seen.

The appendant tumor was filled with little tubuli in mucous membrane arrangement and containing similar carcinoma cells. These cells were often dilated, and ring about somewhat loosely. There was a stroma of connective tissue, not excessive in amount. It streams out from the cervical portion along with the glands. This is another example of glandular carcinoma at a commencing stage.

37 165 Collet - Great carcinoma growth in the cervix with perforation into the bladder. Much distant tissue on the cervix surrounding tissues hardened and infiltrated. Microscope - Carcinoma tissue is found a small tubuli in many sections the cells had fallen out - a clear papillare wall. Some still filled with these cells seem to be gland-like shaped epithelial cells lying close together, especially in the
Carcinomatous腺上皮细胞，其大小和形状不规则。这些细胞相互重叠，形成无序的结构。上皮细胞的排列不规则，显示出不典型生长。

**Histological Features**

- **Carcinomatous Mass**
  - Cells are arranged in clusters and sheets, with some areas showing glandular differentiation.
  - High cellularity and mitotic activity are observed.
- **Surrounding Stroma**
  - Fibrous stroma is densely packed with collagen fibers.
  - Dilated blood vessels are present.
- **Invasion**
  - Cells extend into adjacent tissue, disrupting normal architecture.

**Clinical Relevance**

- **Diagnosis**
  - Carcinomatous adenocarcinoma
- **Prognosis**
  - Poor, with widespread metastasis to lymph nodes and distant organs.
- **Treatment**
  - Surgery, chemotherapy, and radiation therapy are standard approaches.
which are a part invades. The carcinoma would seem to arise partly from the surface epidermis tissue.

GREAT CARCINOMA, growth over cornual and vaginal portion of uterus. It also extends over upper part of vagina. The general aspect of cancer is ragged and it is hardening to the touch, and a gray column microscopic. It is seen to be composed of tubular space and small lumina in all directions, filled with epithelial cells, then forming all nests and though somewhat degenerated, a capsule forming around it. It must be made out - another among pseudomesenchyme. The tubules can be traced, filled with epithelial cells, and lying next blood vessels. This is stratified epithelium - tumor.

No. 29 C. A carcinoma when help to cavitate itself over lower division, sub. (Cancer as Pseudomesenchyme) when peritoneal posterior and Douglas found. So at present microscopically the structure of a typical stratified epithelium tumor extending into cancer a considerable distance and reaching down into vagina. - The nerve cell stands to be seen which are normal and the cancer tubules are there in the neighborhood. The muscle is involved a part of the cancer and like pseudomesenchyme cells the new growth among the fibers. There is a stroma of connective tissue and no place to the cell epithelium meet with then.

CASE 1. - Great Carcinoma over cornual and vaginal portion of uterus. It is also seen in bursa tubular but through a grey area, the cell nests, and pearl bodies are clearly brought out. That much, it contains. It is tubular can happen be made out. The stroma is fully formed. Connective tissue and the muscle is invaded. Stratified epithelium cancer.

These preparations show that it various savages present. Cancers grow, which he attacks it known chamber gets. Where for in all the sperm, it body was entire seems how the disease spread itself and infiltrates, going
1. Paraffin towards the parenchyma and down towards the Meissner's. These fat deposits of surface tissue to large alveolar formation.

These are distinctive forms of cancer in these appearances.

1. The stratified epithelial cancer. Called carcinoma in situ. Common stage in which there are most numerous examples. It has the greatest form of extension and infiltration. The cells of the carcinoma alveoli from cell rests and pearl body formation. The glands of the cancer may remain normal.

2. a glandular cancer. Examples. The carcinoma change is not as in the cylindrical epithelial glandular glands. The cells enlarge, divide and increase, and then carcinoma cells are formed. The glandular type is preserved in the exterior but carcinoma glands are not found. Internal tumours containing thence glands may be found depending on the surface. The cells are somewhat loose arranged and come in separate systems from the tubules and are not wide separating systems. The blood vessels in the neighbourhood are not formed active.

2. Carcinoma arising in squamous, ovarian, time

The alveoli are not large. There are a great number, and there is no connective tissue around them. The carcinoma cells are not large and not polymorphous shaped.

I come now to the latter part of my work. Examination of the preparations from Berlin, handled in alcohol for microscopic investigation. Shall describe these preparations.

1. a portion of the Carcinoma of the adrenals are somewhat thickened and aneurysm Exterior. Membranes in cancer are to be somewhat swollen, and a hard even porous opening. On cutting into the specimen a white cancerous growth is seen, which seems to extend in a bow-shaped manner up into ovaries.

Microscope. - Membrane membrane. The surface cancer with
Periarterial Cystic Hyalinized Epithelium.

Gland with Acini.

Malpighian Epithelium Cell

Acinus Alveoli

Glandular Cystic Tumors

Giant Cell

Pearl Cell

Giant Cell

Nuclei
Cylindrical Epithelium — all the gland tubes widens
and cloths with cylindrical epithelium and then lead down into widen glands, which are filled with cystic material and lined with cylindrical epithelium, which is somewhat swollen. These are oval on both sides. The cystic material can be traced out to the surface and contains a few cell elements. All the glands in this situation are similar affeeted — no normal glands to be seen.

Above these glands is new the carcinoma growth. This consists of a mass of enlarged and considerable size, filled with large polymorphous epithelial cells — nuclei all

They come close up to the glands, but there is no trace of any communication with the cylindrical epithelium of the glands. The carcinoma epithelial cells in the tumour are arranged close together and many plan can be seen beautifully the different stages cells — with fibres somewhat concretal, then more rounded and flattened for a fine layer, until squamous epithelial cells are reached in parts. The formation is beautifully seen of large number of plant body formations, one seen. These may be two or three with same alveoli. The horned material is the centre stains yellow with Prussian blue, many individual nuclei stand up. Can be seen round about the centre. In many alveoli particularly towards the centre of the tumour are to be seen a large number of giant cells. These giant cells are large irregular masses of protoplasm with many nuclei. These cells, by sometitse, in the alveoli and two other would be found together in the same alveoli. The remaining cells were polymorphous with one nucleus. Giant cells and partly too as observed in the same alveoli in many places generally some little lateral aspect. The Carcinoma growth extends to the trachea as it was also a part infiltrated. There is a

active stroma of firm connective tissue, and small cells infiltrating throughout. There are muscular muscle fibers composing the stroma as well. The Carcinoma growth is
A stratified epithelium carcinoma and it is remark-
able because of the large number of giant cells occurring all through it - these may be the same cells with cell nests and Pearl body formation. The glands are 
chamfered (optical effect) and there is no connection between their cylindrical epithelium and the cancer cells.

BFF. Piece from uterine muscle and Portis
Portis looks normal. Cervical mucous membrane
rough with traces of blood and inflammatory action in
Portis. Under mucous membrane and against muscle in
Tumor, egg shaped while Cervical Tumor is plane -
what Portis. A solid tumour in Portis. The muscle wall impinged upon by the
Tumour looks atrophied

Microscopic - In a section from Portis and adjacent cervix
Carcinoma - normal Portis papillae with yellow loney
open lumen. In close proximity a large array of
Carcinoma alveoli of rounded shape and much the same
size. These cells are filled with one rounded mass
with distinct nucleus, not not large. A few small
alveoli can be seen. There is nothing to be remarked
in the arrangement of the cells with alveoli except that they
are irregular and in groups at periphery

The Cervical mucous membrane is seen to present a somewhat
inflamed aspect, with small cells at surface, but normal
Cylindrical epithelium to be seen. The glands under the
surface present a curious widening and go for some distance
to deeper tissue. There are little papillary elevations
covered with transparent cylindrical epithelium. There is
no Communication between glands and
Cervix alveoli.

Section from Portis. Higher up in uterus, where mucosa
Tumour comes close to surface
Cylindrical epithelium on surface to be seen. In some places
Extensive scotched blood superficially, as inflammatory.
Some places the Cylindrical cells are seen to take on a change. The surfaces are numerous, split apart into - fit printers, alive - an aorta close together from many layers. There are glands below the surface with the cells changed in shape. Many to three acute before that now so large enter - a will to make a cloth. Cylindrical epithelium is seen to be seen. In the remaining part the cells have taken on a carcinomatous change. They are changed - shaped, formed in numbers, some into large or small and the whole gland. The gland is filled up with the cells. A central lumen may be left.

The change in the surface is somewhat different. The carcinomatous growth has begun in this region and spread away at forming the lumen already described. It has originated in the carcinomatous transition of the cylindrical epithelium both in the surface of the mucous membrane and in widened and branched glands. The alveoli in the deeper parts preserve the glandular like shape. They are filled with cells in regular order, especially at the periphery and round about the lumen. The cells are of a somewhat cylindrical shape with their long axes toward the centre of the alveoli. There is thus preserved a wide channel filled with layers of pallisade-like cells, and a central lumen still existing. In many alveoli an atypical-shaped cells but no special formations to be seen. When the alveoli press against the muscular wall the connective tissue between is seen to be increased and to be pressed into layers, which is well brought out by the staining. The stroma & connective tissue is in a very active state of growth. There are rows of nuclei to be seen, as they are regularly distributed and in no order. This is a Cylindrical Epithelium.
Postis seen to leave off and the Carcinous growth comes close to the surface but in closer observation the papillae are seen to be atrophied and pressed out by the invading Carcin Alveoli. The horny layer is intact throughout. The remainder of the Postis mucous membrane is normal.

The Carcinous mucous membrane presents inflammatory process and small cells together with blood corpuscles upon its surface. A number of normal cylindrical cells are to be seen. Near the surface are irregularly widened glands but not lined with normal cylindrical epithelium throughout. The greater part of gland is lined with layers of cells which have still a somewhat cylindrical shape when they touch normal cylindrical epithelium. It transitions over the new going on. The growth of the Carcinous alveoli would seem to go out from this place and the alveoli extend down into the postis. The cells within the alveoli are rounded or oval, in very regular disposition around the lumen. The muscle layers are reached by the alveoli.

The stroma is of connective tissue, and there are many wandering cells to be seen in it. The nuclei are relatively small.

This is a Glandular Carcinoma - Cylindrical Epithelium.

134. - Piece from Postis and Carvical part of uterus

No Carcinous mucous membrane to be seen. A Carcinum of grayish colour extending to its muscle area and down into Postis of regular outline. Microscopically - Postis of postis mucous membrane with normal papillae and epithelium still existing. Anteriorly there is Postis mucous membrane with Carcinous alveoli in close contact but no union. The tumour is seen to consist of alveoli filled with cells of a rounded shape and not of great size. The alveoli reach to the muscular layer where the connective tissue has much blood extravasated (possibly due to operative intervention). The Carcinous alveoli take a direction toward the muscle wall and preserve a distinct glandular shape. The stroma is
great important i.e. it is not present in amount.
It is a glandular mass in a more advanced state than last
piece from Portis and uterine wall with a soft Caulcium
necrotic growth in cervix. No cervical muscles present to be
seen. The Cervical growth soft and a matted appearance
Portio divided into 2 or 3 leaves as it were
Microscopically the Portio presents nothing particular, more
like a normal structure. The Cervical substance consists
of a large number of Alveolar, of considerable dimension
filled with cells characteristic of Cylindrical Epithelial Cervix.
The cells in the middle have much fallen out but there are
many rounded cells with distinct nuclei and tending to form
an typical long palisade cells, closely packed together
with their long axis towards the centre, and then all more
closer to the peripheral wall. There are many small
cells to be seen amongst the large. The stroma is not
excessive. This is another example of glandular or
Cylindrical Cervix.

360. Piece from neck of uterus with Portio
it soft white mass with numerous small villus
stubs on lower part of cervix and going over Portio in part
Microscopically: There is new an uneven surface, covered
with Cylindrical Epithelium. The substance of the growth
is composed of Small round cells, essentially granulation
tissue. There are erosions glands, to be seen lined with
translucent epithelium. In one or two places are a number of
Small heaps of Carcinomatous cells, somewhat larger than
the cells of the surrounding tissue. They are seen lying close
to the glandular formations but no communication with
cylindrical Epithelium. Between the erosions tissue
blends with connective tissue and farther removed is the
muscle. There is a portion of the Portio beneath the
erosions, with normal papilae and Epithelium.
There are Papillary Fronds, which have from a
time an eroded surface near the junction of cervix and
Portio and they have become Covered with Cylindrical
Epithelium, which has in many places been folded in and glandular-like structures have been formed. The Cancer cells have been pointed out in the tissue. Cells found epithelial cells with distinct nuclei.

Portion from Portion and adjacent Cervical tissue. It is a white mass of soft connective, with soft papillary tufts hanging down towards ports. Microscopically shows tufts to be composed of small cells active granulation tissue — no cylindrical epithelium on the surface. A large number of small Cancer cells, also in the tissue, throughout. Towards the cervical mucous membrane are many warty glands, budding out branches and lined with transparent cylindrical epithelium. There are also some larger cystically warty glandular glands. The Cancer, cells with alveoli are rounded, but larger than the cells of the surrounding tissue. The Cancer cells & alveoli are found quite near surface, as throughout the tissue and reach to the muscle layers. They arise out of the granulation tissue (erosion). There is no transition of cylindrical epithelium to be seen anywhere.

Portion from Portion, with adjacent Portion & Cervical Part of Membrane. Surface of Portion irregular with small excrescences. Portion of Cervical Membrane with small excrescences. Microscopically — Cervical mucous membrane shows many small undulations of Cervix with cylindrical epithelium. The glands are no longer normal; they have become widened in a branching manner and have little papillary projections getting into the interior and clothed with transparent cylindrical epithelium. Close to cylindrical epithelium at junction with portio mucous membrane are Cancerous epithelial cells somewhat indistinct, but there is no transition to be seen. The portio retains its undulating, horny layer spreading over the uneven undulating surface.
There are also biliary prominences (small) on surface of liver.

[Diagram of liver with annotations:]
- Transparent cylindrical structure
- Small biliary prominences
- Muscles
- Superior venous division
- No other membrane

[Diagram of another structure with annotations:]
- Sharp and
- Small, bulging
- Prominent
- No other identification
but then are no longer \textit{basal} vascular papillae. Their cell elements have increased and they have formed epithelial growth reaching away into the deeper tissue. There is no distinct alveolar formation, the cells of the papillae have taken on a hyperactive and formed cancerous cell nests. All the papillae are changed in this way. These cell masses are somewhat pointed at this aspect but protrusions of cancerous cells are seen going along the lymphatic vessels. They are no fully formed pearl beads but the new epithelial cells go on commencing stages, such as seen - horned cells with half-moon shaped cells around. The horned cells are best brought out by using a little trypsin acid.

The epithelial masses blend out quite at their base. There is no communication with cylindrical epithelium. There is no transition of latter, nor are they affected by the cancerous cells. It is a cancerous growing out but papillae get points and the probability is that growing very fast there is no time for pearl body formation. But this commencing stage has been pointed out.

139 - Hardened preparation from uterus wall. Cancerous. No portion adhering. Some mucous membrane existing which appears normal. Muscle wall appears thin and atrophied. Inferior is ragged and too margin. Mucous especially thus is present a large number of cancerous alveoli running in various directions but with a general course away from the mucous membrane. They preserve a glandular type of form and may often there in a central lumen. The cells of the alveoli are laid together in good order of somewhat long shape little short cylinders and with long axis towards the lumen. Towards the muscle wall the alveoli are smaller and penetrate amongst the muscle fibres. The stroma of connective tissue is not infiltrated. This is a pure example of Cylindrically Carcinoma. The glands in the mucous membrane above the diffuse part are...
Body of uterus not diseased. Aroids and Vesicula much destroyed by Carcinoma new growth. This forms a thinning and infiltration which goes into the parametrium & neighborhood.

Microscopic preparations from these situations, the parametrium & both sides of the uterus exhibit something the same picture. There are numerous tubule of different dimensions separated by a considerable amount of stroma. The tubule are filled with somewhat rare, rare polymorphous cells in many places in layers and forming pearl-bodies. The cells are often fallen out but there is no lesion to be demonstrated in any. Progressions of the cancer cells can be tracked in the lymph vessels, and arteries are found traversing in the muscle layers.

The stroma of connective tissue is fully formed. There are no glands in relation to the microscopic preparation.

It is an example of Stratified Squamous Epithelium.

Lastly on the 18th April I had the opportunity of examining the uterus of a woman who had recently died and had suffered from Carcinoma disease of the uterus. She was a married woman of the age of 68 years. There is the history of a tumour having existed in the uterus for the last 20 years. Death set in through exhaustion brought about by long-standing bloody and chronic discharge.

The uterus was much enlarged. In the wall of body was a very large Palmarious mass less than a Cricket ball, covered with a Palmarious Tissue.

In the lower part of the body were small hard lumps under the mucous membrane. Around the cervix was the hardened ring of Carcinoma disease in which the mucous membrane was destroyed in part and covered with chronic discharge. I took a slice from this diseased cervix hardened to a few days in alcohol, and finally made microscopic preparations.

The Cylindrical Epithelium of the surface was gone.
and thus were the products of inflammation - blood, pus, muscles, etc. - small cells, etc.

No normal glands to be seen. They have all gone over into adenomatous change. There is presented an extensive growth of alveoli, the walls of which are clothed with cylindrical epithelium not transparent, epithelium.

The alveoli grow narrower in a direction away from the surface and the lumen is wide in each. Many of the alveoli are more widened, but tubular, and filled with carcinomatous cells. These are not large, are somewhat rounded, and loosely arranged, and are nodules. There is not much stroma so that the tubule, alveoli, lie not for a long time.

The alveolar growth extends to the muscular wall and in part it is invaded. It is a pure example of Adenocarcinoma. It seems to resemble the Glomus caruncula formation described by Carl Schreber (Zeitschr. f. Geburth. u. Gynäk. 1549) and called by him Adenoma Diffusum.

Adeno-Carcinoma is an Epithelial tumour formation composed of alveoli with wide lumina and lined with cylindrical epithelium, but many of these are filled with carcinomatous cells; and it has great power of extension but does not form internal tumour growth.

Some facts stated above the Carcinomatous changes found in the Carcin and portio are very various and of very weighty importance. I recollect 5 distinct varieties as occurring in the Carcin and Portio of the uterus: I tabulate them as follows:

<table>
<thead>
<tr>
<th>Carcinomatous</th>
<th>Number</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stratified Epithelial</td>
<td>7 cells</td>
<td>Vascular papillae and stratified epithelium</td>
</tr>
<tr>
<td>Cylindrical Epithelium</td>
<td>2, 4, 5, 7</td>
<td>Cylindrical Epithelium (surface)</td>
</tr>
<tr>
<td>Cystic Carcinoma</td>
<td>2, 7 cells</td>
<td>Cylindrical epithelium (crypts)</td>
</tr>
<tr>
<td>Tubular Epithelium</td>
<td>4 cells</td>
<td>The cylindrical epithelium is filled with a tubular growth</td>
</tr>
<tr>
<td>Adeno-Carcinoma</td>
<td>1</td>
<td>The Cylindrical Epithelium is adenomatous</td>
</tr>
</tbody>
</table>

The first cases are of Stratified Pseudometaplastic Epithelium (Carcinoma) and possesses the stratified arrangement of cells in the Carcinoma.

Vincin, 1865, 1866.
Alveoli forming pearly bodies. The surface epithelium interlaced with it and the adjacent tissue transparently infiltrated and the disease spreads by perine to the perimetrium, and down into the vagina.

In some young cases it there was communication with the cylindrical epithelium of glands altered or not so with surface epithelium.

The Case B1 is very remarkable with its giant cells in the connective tissue. In it the glands are evident and contain clear contents. In B3 the glandular epithelium has no communication with it. The glands bridge and not direct a case. "Shin cancer" arising out of cylindrical epithelium.

The second forms a dense condensation going out from cylindrical epithelium, forming alveoli which preserve its glandular-like type, and the cells which lie in layers preserve a somewhat cylindrical shape.

This variety forms an isolated tuft. It may be seen in the mucous membrane and the muscle wall.

The third is interesting as exhibiting carcinoma arising out of glandular or fibrous tissue with villation and no transition of cylindrical epithelium in its neighbors. It may bring in the question of inflammation as the blood supply having something to do with its setting up of cancer. Glandular tissue forms out of luminescences as the blood and it goes on to further stages of development of carcinoma. It may be well to quote the following: "In connection with the origin of carcinoma from tissue, the skin of Spitz as it appears in "Les elements de l'oeconomie" Paris 1891." The answer to the question of whether there is a specific alteration of the white blood corpuscles lies at the bottom of cancer formation. These luminescences grow longer, proliferate, and form themselves together in the epithelium, "grow out of the anterior and form the tumor." Orth's Lehrbuch. Spitz: Pathol. Buch. Berlin 83, p. 16. The claim that many of the carcinomatous cells in definite tissue are found in secretory tissues and independent glands or..."
Cylindrical Epithelium - Prune and Vesic found it Cylindrical Epithelium which has grown from the mucous or connective tissue on a Causious change

The first is Characterized by a Change taking place in the cells having lengthwise and widthwise glands, whereby there is increase of the cells by division; they become irregular shaped, do not form themselves in layers but are somewhat flattened though showing much to the basement membrane of the gland tube. They find way to outward in the shape of poly france formation filling it. Poly size from an expense over the cells take on a similar Causious change.

The Causious glands progress in an insidious manner into the deeper tissues - destruction of the surface soon returns. The blood vessels in the neighborhood are found active.

The second - Adenocausious Malignant adenoma has already been discussed upon at some length and is quite different from the others. It is rare. It forms distinct chord tumor grows on the axis of from a smaller number of few formed glands close together. The change begins in the glands, and the surface histological basins include in it destroyed Causious cells retaining shape and just large size begin to fill up the lumen of the alveoli, which have grown rapidly as estimate away from the surface. The cells do not form into layers and nests.

I have nothing to say about Connective tissue Causious. I know no Case pointing to such an origin for this disease. I must hold to the notion that epithelium grows out of epithelium just as skin grows out of it in all and down by Waldeyer, Meyenberg and others. In B z pat. I observed great changes going on in the connective tissue around the masses of Causious Epithelium cells. And sometimes this were very small collections of cells in the connective tissue, but nowhere could a transition to connective tissue elements into Causious masses be demonstrated.
Perhaps a knowledge of these forms with their respective origin may be of practical use to the gynecologist for an attempt to procure a piece of diseased tissue from the uterus for diagnosis, according as it was found to be of the form which occurs as distinct circumscribed tumour formation or the form which grows diffused, with indeterminate situation. The plan of operation might be materially modified.

Before closing I have a word to say in grateful acknowledgment of the kindly assistance of Professor Otto in putting everything with Pathological Laboratory at my disposal and rendering me every facility to prosecute my research.

James M. Martin.

Göttingen 17th May 87