ARTHUR PURDY STOUT SOCIETY

SEMINAR

Comprised of Eleven Cases - 1959

New York City
June 13, 1959

Arthur Purdy Stout Society Seminar
New York City - June 13th, 1959

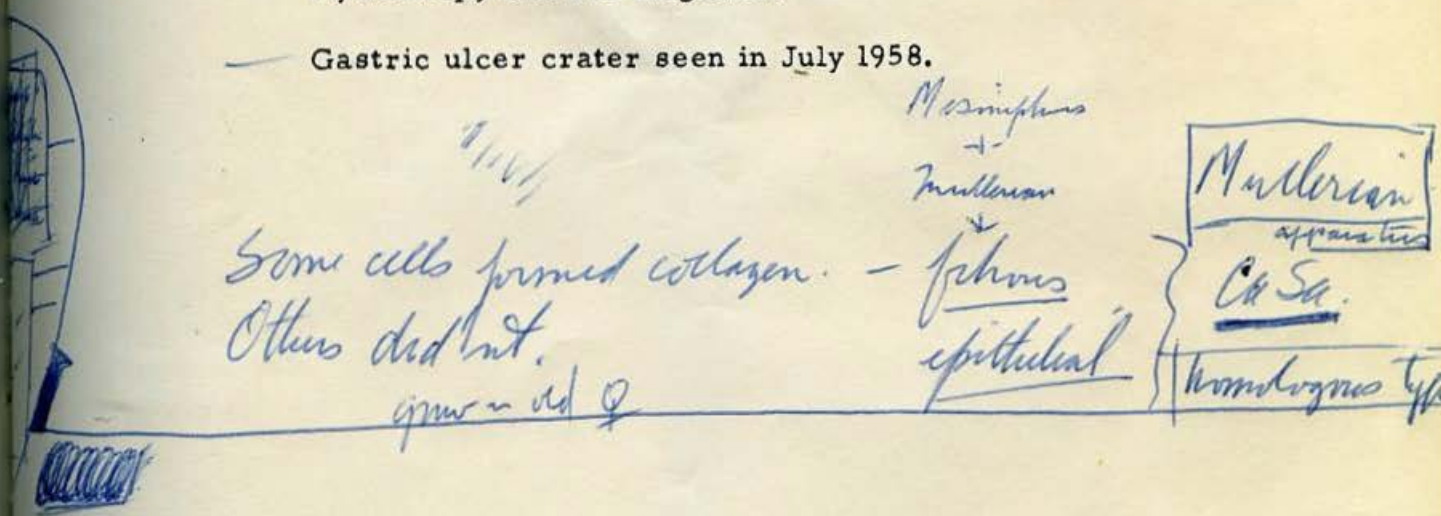
Case 1 - P&S 62224
Contributed by:
Dr. Raffaele Lattes

HISTORY: Female, 60 yrs. Last gynecological examination 13 years ago. Starting on August 4th, 1958, vaginal bleeding for 12 days. Bleeding recurred on August 20th.

Sept. 2nd, 1958: Negative vaginal smear reported. "Re-established estrogen activity" (Nieburg). Hysterogram: uterine fibroid. Biopsy of rectum: proctitis. Mass protruding from cervix.

Cystoscopy and IVP negative.

Gastric ulcer crater seen in July 1958.



Arthur Purdy Stout Society Seminar
New York City - June 13th, 1959

Case 2 - P&S 62924
Contributed by:
Dr. Raffaele Lattes

HISTORY: Female, 45 yrs.

Large polyp of uterine cervix removed because of bleeding.

Many retraction fibres in all areas.
Leiomyoma.

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Case 3 - P&S 63561
Contributed by:
Dr. Homer Kesten

HISTORY: Female - 64 yrs.

Chief Complaint: Yellowish vaginal discharge for 6 months.

Physical Examination: Polypoid mass visible protruding from cervical canal.

Operation: Fibrotic polyp on broad stalk removed from cervix. A smaller polyp curetted from the body of the uterus with a little endometrial tissue.

Gross Examination: Curettings with small polyp 1 cm. in maximum dimension and a larger polypoid mass said to be from the cervix. This was 1.8 cm. long and up to 6 mm. in diameter.

Follow-up: Uterus, tubes and ovaries removed about 10 days later. The uterus was small and atrophic with a small myoma. No residual tumor demonstrated. Ovaries atrophic.

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Case 4 - P&S 62543
Contributed by:
Dr. Alvin O. Severance

HISTORY: Female, Age 39, complained of pain in the right lower quadrant and in the back. This complaint has been present on and off for the past several years, but has become worse and is now almost continuous during the past month. The menstrual periods have been regular, there have been cramps, and the patient has passed clots. Last menstrual period was November 22nd, 1958. There has been some dysuria and pyuria, but this has been treated and is now all right. There has been a 20 lb. weight loss in the past 8 months. No surgery previously; no serious illnesses. Two children, one age 20, one 16. No history of cancer.

Physical examination is within normal limits until we come to the abdominal examination where there is tenderness on palpation in the pelvic area. Pelvic examination revealed a picture of a chronic cervicitis, a 1st to 2nd degree prolapse of the uterus, with retroversion of a large, boggy, tender uterus. The right ovary was enlarged and tender. Rectal examination showed only hemorrhoidal tags.

The patient was explored on December 1, 1958, with the intention to do a hysterectomy for prolapse. However, in examining the pelvic cavity, it was discovered that there was a large papillary type of growth springing from both right and left ovaries and extending particularly down the parietal peritoneum almost to the rectal wall. Portions of the ovarian ligament were involved, especially on the left side. The ovaries and tubes were removed and so was the appendix. The uterus was left behind because a frozen section diagnosis of papillary carcinoma of the ovary was rendered, and it was feared that implantation of tumor cells into the pelvic wound might occur, if the uterus was removed at this time. X-ray treatments have been started. The papillary lesion in the pelvic peritoneum was left behind.

See 1950
51
52

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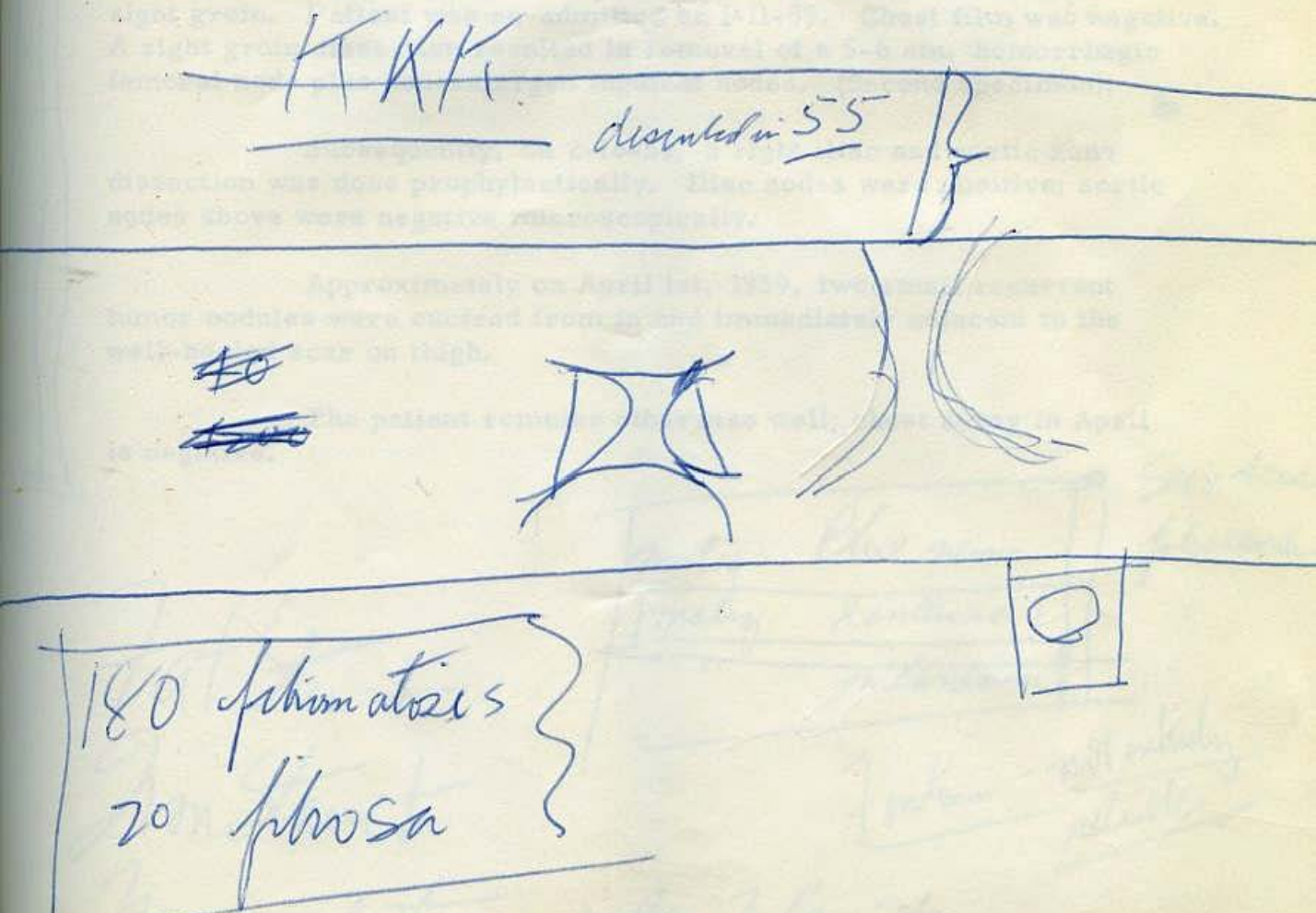
Case 5 - P&S 63171
Contributed by:
Dr. Saul Kay

(S-59-1414)

HISTORY: A 42-year old white male who 10 days prior to admission noted a lump on the left forearm. This was slightly tender, but the tenderness lasted only 3 days. He applied hot soaks without effect.

On physical examination, there was a 3 cm. raised, firm, non-tender mass over the anterior aspect of the right forearm. The mass was not attached to the skin or bone but seemed to involve the overlying muscle. There were no palpable lymph nodes.

A wide excision down to the superficial muscle fascia was carried out. The cut section showed a nodular, flattened mass which appeared to lie in the subcutaneous fat and was limited by the fascia. The mass measured 1.5 x 1 x 0.8 cm. and presented a grey-yellow glistening surface.



Arthur Purdy Stout Society Seminar
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Case 6 - P&S 62905
Contributed by:
Dr. Raffaele Lattes

HISTORY: A 54 year old white female was admitted to Roosevelt Hospital for the first time on 10-16-58. She states she was born with a brown mark on the right thigh. At the time of delivery of a son, approximately 20 years ago, she says that her obstetrician suggested that a lesion at this site be removed. Two weeks before admission she says she traumatized the area with a garter and that it since enlarged. On physical: BP 190/110, P 80, R 16; a well-developed, obese female. There was a "raised, round, bronze color mass on the postero-lateral aspect of the thigh, 5 or 6 cm. in diameter." This was fixed to elevated, intact skin, but apparently not to fascia. It was several inches from knee joint. The lesion was widely excised. Sections through surgical margins showed complete excision (5 or 6 such). Grossly, the dermis and subcutaneous fat contained a central mass, approximately 5 cm., yellow with red foci, soft. A few satellite nodules appeared to be separate from the main mass. (This is your first specimen).

About 2 months later, a mass rapidly increased in size in right groin. Patient was re-admitted on 1-11-59. Chest film was negative. A right groin dissection resulted in removal of a 5-6 cm. hemorrhagic femoral node plus non-enlarged inguinal nodes. (Second specimen). 5

Subsequently, on 2-15-59, a right iliac and aortic node dissection was done prophylactically. Iliac nodes were positive; aortic nodes above were negative microscopically.

Approximately on April 1st, 1959, two small recurrent tumor nodules were excised from in and immediately adjacent to the well-healed scar on thigh.

The patient remains otherwise well; chest x-ray in April is negative.

Seen 4 cases
pheoxanthin

malig Blue nevus
malig Xanthosa
" melanoma

Fat Stain +
Iron Stain +
Iron urn containing pigment Melanin +
Fontana - not entirely reliable.

Arthur Purdy Stout Society Seminar
New York City, June 13th, 1959

Case 7 - P&S 60252
Contributed by:
Dr. Frank Vellios

P-9110

HISTORY: The patient was a 32 year old man whose first symptoms, in the Spring of 1957, were those of a sore throat. He was treated with antibiotics and antihistaminics, but the symptoms persisted. About nine months later, the larynx was extremely red and swollen and the glottis was so narrow from subglottic swelling that a tracheotomy was necessary. A small pre-laryngeal node discovered while performing the tracheotomy was removed. This node contained tumor similar to that seen later in the laryngectomy specimen. Biopsies of the larynx at this time did not contain tumor, but it was thought that they were not from the sites of laryngeal involvement by the lesion.

Roentgen therapy was given with a calculated tumor dose of 6200 R. The lesion was reduced in size, but in three months it again completely occluded the subglottic airway. No nodes were palpable and esophagoscopy revealed no involvement of the esophagus.

Laryngectomy was performed on April 30, 1958. Tumor involved the anterior esophageal wall and extended far down the trachea, even beyond the third tracheal ring where the trachea was transected. The larynx was involved extensively by the tumor, which was grey-yellow and firm.

Nitrogen mustard therapy was given in early June 1958, but the neoplasm was not affected. The patient experienced an increase in hemoptysis, difficulty in swallowing, persistent nausea, and increased pain. He died in February 1959.

At autopsy, tumor involved the cervical region extensively and metastases were found in most of the viscera. Large nodules were confined to the organs above the diaphragm, including the heart and pericardium.

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Case 8 - P&S 62695
Contributed by:
Dr. Philip Flynn

HISTORY: Patient is a 69 year old male who, for the past 3 years, has had a "chronic infected right great toe-nail." The nail-bed has been replaced by a 2.0 cm. ulcer. Recently, enlarged right inguinal lymph nodes were found. Following biopsy of the ulcer of the toe, this has been amputated and subsequently a radical inguinal and iliac lymph node dissection was performed. Sections are from the ulcer of the toe and from the inguinal masses.

Arthur Purdy Stout Society Seminar
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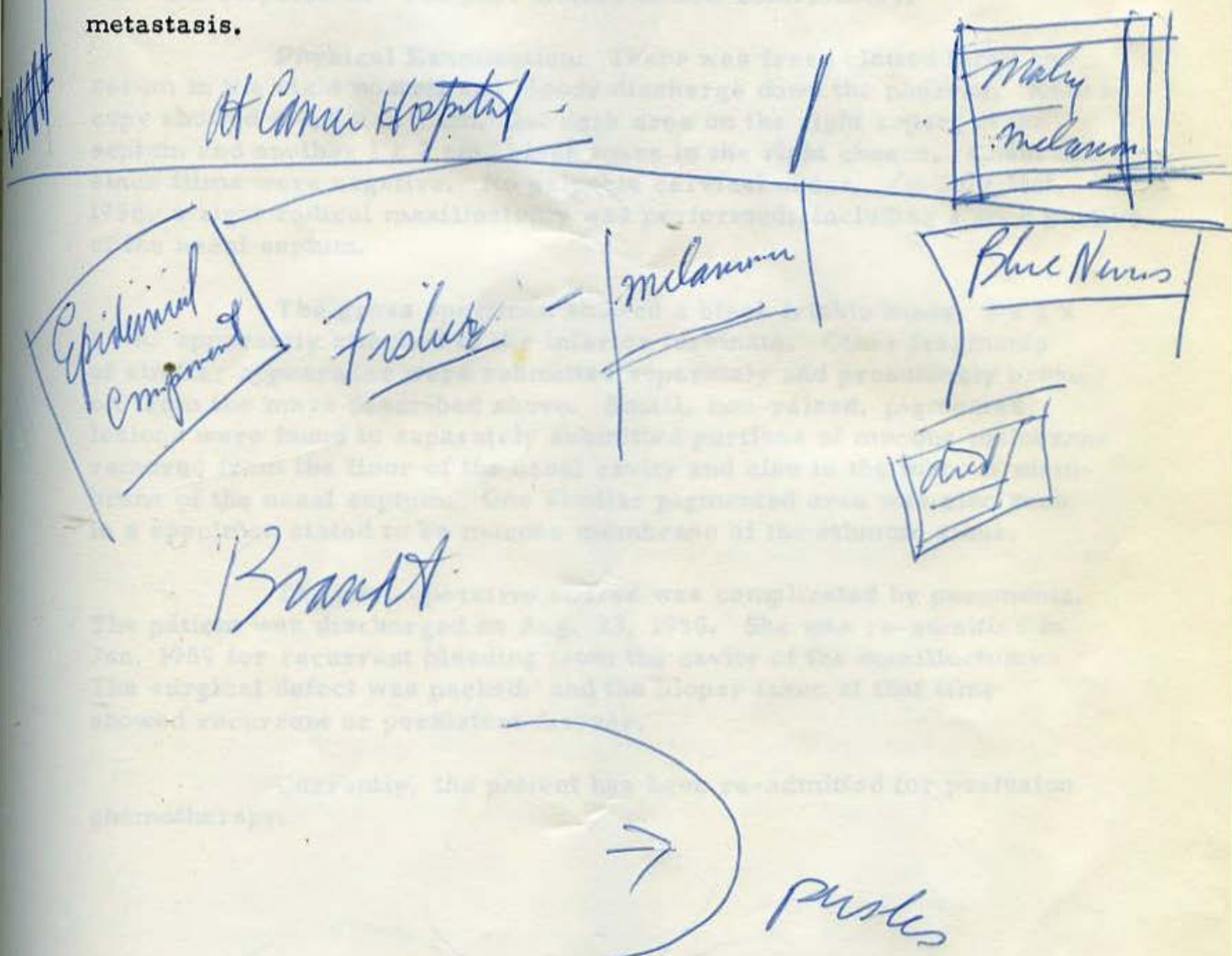
Case 9 - P&S 59739
Contributed by:
Dr. Raffaele Lattes

150 f

HISTORY: Slowly-growing tumor of foot, in subcutaneous region near scaphoid bone, present 7 years. Removed by wide local excision.

age?

Patient was seen one year following the operation on the foot, and at that time there was no obvious recurrence or distant metastasis.



Arthur Purdy Stout Society Seminar
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Case 10 - A-70475
Contributed by:
Dr. Raffaele Lattes

HISTORY: This 70 year old white female was in good general health until October 1957 when she developed "a persistent cold" with rhinorrhea and sneezing accompanied by "cold sores", inside and outside of nose. The herpes cleared up, but the discharge persisted and became blood-tinged in February 1958. At this time, "sinus trouble" was diagnosed and topical therapy was given without improvement. Because of this, she was finally referred to an ENT specialist who saw a growth in the nose and biopsied it. The past history is non-contributory.

Physical Examination: There was fresh clotted blood and serum in the right nostril and bloody discharge down the pharynx. Endoscopy showed a 0.5 x 0.8 cm. flat dark area on the right aspect of the septum and another 1 x 2 cm. black mass in the right choana. Chest and sinus films were negative. No palpable cervical nodes. On July 31st, 1958, a right radical maxillectomy was performed, including a good portion of the nasal septum.

The gross specimen showed a black friable mass, 5 x 2 x 1 cm. apparently attached to the inferior turbinate. Other fragments of similar appearance were submitted separately and presumably broke off from the mass described above. Small, non-raised, pigmented lesions were found in separately submitted portions of mucous membrane removed from the floor of the nasal cavity and also in the mucous membrane of the nasal septum. One similar pigmented area was also seen in a specimen stated to be mucous membrane of the ethmoid sinus.

The post-operative course was complicated by pneumonia. The patient was discharged on Aug. 23, 1958. She was re-admitted in Jan. 1959 for recurrent bleeding from the cavity of the maxillectomy. The surgical defect was packed, and the biopsy taken at that time showed recurrent or persistent disease.

Currently, the patient has been re-admitted for perfusion chemotherapy.

Arthur Purdy Stout Society Seminar
New York City, June 13th, 1959

Case 11 - A-72725
Contributed by:
Dr. Raffaele Lattes

HISTORY: This 60 year old woman was admitted to P. H. in October 1958 because of a coin lesion found on x-ray of the chest. For several months, she had had exertional dyspnea and left posterior chest pain.

In her past history, there was a hysterectomy in 1943, the reason for which is not known. In 1946, she had a subtotal thyroidectomy for hyperthyroidism. In 1951, she had a hemorrhoidectomy. She has been treated for almost two years in our Psychiatric Clinic for emotional disturbances.

The exertional dyspnea seems to have been present for several years but increased in the past 9 mos. There is a history of pneumonia several years ago and then again one year ago and since then there has been a dull intermittent aching pain under the left scapula. When worked up in Group Clinic, she was found to have a mild hypertension with murmurs of mitral insufficiency and mitral stenosis and EKG evidence of a possible old infarction. The coin lesion found on chest films is behind the left hilum in the posterior section of the left upper lobe.

Physical Examination: Palpable nodule on left thyroid. Chest: Some dullness at both bases. Normal breath sounds. Some fine moist rales at left base and ? pleural friction rub at left base.

Laboratory Findings: ESR 12 mm. Hct. 45%. Hgb. 15 gms., WBC 9,150 with normal differential. Serum alk. phosphatase 16.5. Ceph. floc. neg. Thymol turbidity 3+. V.D.R.L. 2+. BSP 15% after 5 min. Urine melanin neg. Pap. of sputum: neg.

In retrospect, the pulmonary shadow might have been present since April 1958, enlarging slowly.

There was no iodine uptake of this lesion. Patient was referred to Surgery for exploration of the pulmonary lesion and for mitral commissurotomy. Both procedures were performed on Dec. 3, 1958. The pulmonary lesion was removed by wedge resection and a frozen section was interpreted as malignant tumor, probably a metastatic sarcoma. For this reason, no more radical procedure was performed.

Gross Description: The wedge of lung tissue removed included a nodular mass 3 cm. in diameter. It was well demarcated and easily separated from the surrounding lung parenchyma. The cut surface was pink with greyish areas and bulged slightly. The surrounding lung parenchyma was not remarkable.

Patient was last seen in April 1959 without clinical signs of recurrence.

Arthur Purdy Stout Society Seminar
New York City - June 13, 1959

INTRODUCTION:

The Seminar this year is composed of cases of two types: those that are easy to diagnose but are unusual because of the situation in which they are found, and those that are more difficult to diagnose or display unusual and confusing features. There are at least two cases the like of which I have never before encountered. They seemed important to me because they both displayed unusual if not unique vagaries of tissue growth and differentiation.

I continue to be amazed at the versatility of cells in producing different tumors. The ability of the mesenchymal cell to produce in a single tumor a variety of different cell derivatives is now well recognized. To this must be added the potentialities of the descendants of such embryonal structures as the mesonephros and the mesectoderm. There are others which seem equally remarkable to me - for example the development and nature of the tissues composing the mixed tumors of salivary and sweat glands. In the past it has generally been assumed that these mixed tumors are derived from duct cells of the salivary and sweat glands, although for me the arguments supporting this hypothesis have never been entirely convincing. Case 8 in the present seminar supplies a strong argument in favor of this hypothesis. The process called metaplasia sometimes confuses the histological picture and makes it difficult to know in a tumor what should be considered a single cell type tumor and what a mesenchymoma or mixed mesenchymal tumor. For example, some liposarcomas have occasionally included bone and/or cartilage within the tumor substance. Is this to be considered metaplasia or is the tumor a mesenchymoma? If the bone or cartilage are perfectly normal in appearance I have generally called the process metaplasia. If these elements appear neoplastic, I have considered them as an integral element of the tumor and classified the growth as a mesenchymoma. Many other comparable situations arise in oncology and I have tried to apply this criterion to all of them but of course I do not know whether or not this is a proper procedure.

These thoughts occur to me when I contemplate the enormous undertaking sponsored by the World Health Organization which is designed to bring the whole world of oncology together and persuade them to use a common nomenclature for tumors. Personally I am glad that I shall not have to be concerned with this for I feel far too ignorant to debate the subject. I shall leave it to the experts but I don't guaranty to use the new nomenclature when it has been devised nor, I imagine, will the nationals of other countries.

Arthur Purdy Stout, M.D.

APS:KS

Arthur Purdy Stout Society Seminar
New York City - June 13, 1959 Case 1 - P&S 62224

Diagnosis: Carcinosarcoma of Uterus.

MICROSCOPIC OBSERVATIONS:

As far as I can see in this case the tumor is made up of two elements:

1) A dominant one consisting of rounded cells of an epithelial aspect arranged in rounded masses and short cords. I can find no differentiating features in these cells; no mucin or other cytoplasmic secretions or formations, no epidermoid or glandular formations, and the Laidlaw stain shows that there are no reticulin fibers among the cells.

2) Between the many masses of cells of an epithelial type are sometimes ordinary fibrous stroma and sometimes a nondescript type of tissue of a sarcomatous aspect that has reticulin fibers between almost every cell. Sometimes the junction between the two tissue types is abrupt without evidences of transition and sometimes it is more gradual so that one wonders if they belong together and perhaps have a common ancestor. Mitoses can be found in both areas. The tumor invades the endometrium and the myometrium.

DISCUSSION:

This case was put into the Seminar to enable us to discuss nomenclature of these confusing uterine tumors in elderly women. I think we are all familiar with the polypoid type of tumor of the corpus that often projects out through the cervix in elderly women and has such a variable histological picture in different cases. They are almost all very malignant, frequently metastasize and kill. One has the choice of either giving them a name depending upon their apparent histological composition such as carcinosarcoma, malignant mesenchymoma, or collision tumor, and if they are not mixed, call them carcinoma or sarcoma as the case may be with the type mentioned, if that is possible, for example leiomyosarcoma. But there is another way of looking at the problem. It has been pointed out and probably with justice that the complex tumors are descendants of the mesonephros and usually from its Mullerian derivative, that such tumors should have a name indicating the embryonal derivation and that one should stop using such names as mixed tumor, carcinosarcoma, mesenchymoma, collision tumor, etc. But one gets into difficulties with this procedure since all the uterine tissues are mesonephric Mullerian derivatives and why should some tumors of the uterus receive special naming of this sort and not others? My reason for wanting to continue to call a malignant tumor made up of different appearing cell elements both epithelial and mesenchymal a carcinosarcoma is that I use the same term for similar tumors in different parts of the body wherever they occur; it is a good descriptive term and I see no reason for abandoning it for a local term.

I raise this point for discussion because certain enthusiastic oncologists in different parts of the world are preparing to spend years trying to reach a decision on the proper naming of tumors so that everyone everywhere

(continued)

will use the same name for the same tumor. This is a project sponsored by the World Health Organization, which no doubt is inspired by the same ideals that formerly inspired the League of Nations and its successor the United Nations, which by transposing two letters is more aptly designated the Untied Nations. I am afraid I am a disillusioned sceptic in regard to this project. I think I can spend my few remaining years more usefully than by trying to compromise with a bunch of suspicious pathologists of all the nations who no doubt will be fearful that they are going to lose face if they are forced to abandon the cherished names to which they have become accustomed.

To return to this tumor, I think it is a malignant tumor of intermingled carcinomatous and sarcomatous elements and my classification name for it is carcinosarcoma.

Reference:

Ober, W.B.: Uterine Sarcomas: Histogenesis and Taxonomy, Ann. N.Y. Acad. Sci. 75: 568-585: 1959.

Arthur Purdy Stout, M.D.

APS:KS

Arthur Purdy Stout Society Seminar
New York City - June 13, 1959 Case 2 - P&S 62924

Diagnosis: Vascular Leiomyoma of the Uterus.
vs. ENDOMETRIAL STROMAL TUMOR

MICROSCOPIC OBSERVATIONS:

This uterine tumor has a very striking pattern. There are anastomosing cords of darkly stained rounded and spindle shaped cells that stand out strikingly because they are separated by a very loose-textured tissue which in many places seems to form a wide meshed reticulum of apparently stellate cells with anastomosing arms. With the Laidlaw stain it is found that this is really an open meshed tangle of delicate reticulin fibers. One's attention is also called to the fact that there are a good many blood vessels set about at haphazard in this reticulin meshwork. With the same stain one finds that the cords of darker cells are all accompanied by reticulin fibers probably between and around most of the cells so that part of the density of the cords is due to more closely set reticulin fibers. The trichrome stain is of great help in this case for it shows occasional myofibrils associated with a few of the elongated cells in the denser areas. It also shows that some of the cells in the loose-textured reticular areas have acidophile cytoplasm. This suggests but does not prove that some of the cells in these areas may also be leiomyocytes. I have not detected mitoses in any of the cells.

DISCUSSION:

I am always fascinated by the many different aspects that leiomyomas can assume. I do not imagine that any of you will have trouble in recognizing this tumor as a leiomyoma but it is an odd configuration and might make the unsuspecting wonder if those striking cords of cells could represent some other kind of growth. I am also frequently puzzled by the observation that many remarkably vascular tumors can have what appears to be extensive areas of degeneration or necrosis. It would seem as if an abundant blood supply in a tumor does not always guarantee that it will be well nourished. Ever since the fascicle on tumors of the stomach was finished I have regretted that I did not spend more time describing the bizarre variations of leiomyomas. It would seem that these bizarre changes in leiomyomas occur especially in the smooth muscle tumors of the gastrointestinal tract and uterus. I do not recall having seen them in the leiomyomas of the esophagus and superficial tissues. Any leiomyoma can imitate a neurilemoma but not all of them show these bizarre changes.

I know that these tumors have provided an endless source of puzzlement to pathologists for I am constantly having referred to me stomach tumors that don't look at all like smooth muscle neoplasms yet are such, I am convinced. If I was not so embroiled with children's tumors I would try to put together our material. It would be expensive to publish as it would need many illustrations.

Arthur Purdy Stout, M. D.

APS:KS

Arthur Purdy Stout Society Seminar
New York City - June 13, 1959

Case 3 - P&S 63561

Diagnosis: Cystosarcoma Phyllodes of Polyp of Cervix Uteri.

MICROSCOPIC OBSERVATIONS:

This is obviously a benign adenomatous polyp of the cervix insofar as its epithelial elements are concerned. The unusual feature is the stroma which shows a marked proliferation of fibroblastic-appearing cells of varying sizes, some with single giant nuclei and some multinucleate. Mitoses are extremely rare.

DISCUSSION:

This tumor was put into this Seminar to find out if anyone has seen a cervical polyp comparable to it and to inquire what the concensus of opinion is regarding the treatment used. I have not seen a very large number of cervical polyps but I cannot recall any that showed a comparable stromal change. When I was consulted by Homer, I thought the stromal proliferations looked sarcomatous. Although it did not occur to me at the time, this lesion is so much like cystosarcoma phyllodes in the breast that I am tempted to use that term in diagnosis. I think it is better than to call it pseudosarcomatous because if it is really like the breast lesion someday a malignant counterpart in the cervix may behave like a malignant tumor and metastasize. In any event my recommendation was to do a total hysterectomy. A gynecological pathologist in New York who was also consulted insisted that the polyp was benign. Of course he was right, but I do not regret having been in doubt and recommending total hysterectomy. After all, why take a chance in a 64 year old woman.

Arthur Purdy Stout, M. D.

APS:KS

Arthur Purdy Stout Society Seminar
New York City - June 13, 1959

Case 4 - P&S 62543

Diagnosis: Papillary Mesonephroma of Ovary
(Mullerian Tumor)

MICROSCOPIC OBSERVATIONS:

This papillary tumor is attached to the surface of the ovary and the surface cells covering the ovary are continuous with the single layer of cells covering the papillary formations. They are somewhat larger and plumper than the surface cells but they have a reasonably close resemblance to them. The cells cover fibrovascular cores. I believe that almost invariably they form only a single layer. Where there seem to be more it is probably due to tangential cutting. The mucicarmine stain shows a number of foci of pink to red stained material which appears to me to be extracellular and in the fibrovascular core. I cannot recognize any intracellular vacuoles. I used the trichrome stain to hunt for evidence of squamous metaplasia and could find none.

DISCUSSION:

It seems to me obvious that this is a solitary papillary tumor springing from the surface of the ovary and very probably the papillary formations are covered by cells continuous with the surface ovarian cells and very probably derived from them. If these surface cells belong to the ovary and are not mesothelium then this tumor must be a papillary ovarian cell adenoma or mesonephric papilloma. It is of interest to compare its features with those tubular papillary mesotheliomas springing from other parts of the peritoneum and pleura not connected with the female genital tract. The cells are very much alike although mesothelial cells sometimes have secretional vacuoles containing mucopolysaccharide. However, I do not think this is an important observation for the tumors of the genital sphere, which have been called successively endotheliomas, mesotheliomas, adenomatoid tumors and now mesonephromas and Mullerian tumors regularly secrete mucoid material. The only difference that I can think of between this tumor and genuine benign solitary tubular mesotheliomas that are papillary is that even the papillary mesotheliomas form tubes which this tumor has not done. But other buried mesonephromas which are non-papillary form tubes so that this difference seems unimportant.

I have been stubborn about abandoning accepting the idea that Masson's mesotheliomas of the genital sphere are in fact of mesonephric origin but I have now accepted this latter hypothesis. Having done that, to be consistent I believe I should accept this tumor as a papillary mesonephroma of the ovary. It is of great interest to speculate upon the potentialities of a tumor such as this. Could some of it break off and become implanted in other parts of the peritoneal cavity as can happen to other ovarian papillary intracystic tumors considered benign? I do not know the answer to this because I have no background of experience and I have not been able to find the answer in publications. I will guess that it could do so, but that is a pure guess.

References:

Jackson, J.R.: The Histogenesis of the "Adenomatoid" Tumor of the Genital Tract. Cancer 11: 337-350: 1958.

Mackles, A., Wolfe, S.A. and Neigus, I.: Benign and Malignant Mesonephric Lesions of the Cervix. Cancer 11: 292-305: 1958.

Arthur Purdy Stout, M. D.

APS:KS

Arthur Purdy Stout Society Seminar
New York City - June 13, 1959

Case 5 - P&S 63171

Diagnosis: Pseudosarcomatous Fibromatosis (Fasciitis)

MICROSCOPIC OBSERVATIONS:

One is struck by the variability of the histological picture in this small tumor. There are areas of fibroblastic proliferation with occasional mitoses that make one wonder if the tumor is fibromatosis or differentiated fibrosarcoma. But intermingled are other areas which are more vascular and looser textured giving them a granulomatous appearance and some of these areas are infiltrated by inflammatory cells both mono- and polymorphonuclear. The fat is invaded by both fibroblasts and capillaries. In this case nothing suggests liposarcoma but in others the question of liposarcoma has sometimes been raised. The growth is not encapsulated but invades the surrounding tissue.

DISCUSSION:

You may all be familiar with cases like this but I thought it worthwhile to insert one into this Seminar because so frequently they have been mistaken for malignant tumors and those who are not familiar with this lesion still are puzzled by it and suggest that it is or may be a lipo- or fibrosarcoma or a sarcoma of undetermined type. Very often these tumors have a relatively high mitotic rate and I am sure this is taken as supporting the probability of malignancy. This is of course the tumor that the Ku-Klux Klan (Konwaler, Keasbey and Kaplan) in 1955 christened a subcutaneous pseudosarcomatous fibromatosis (fasciitis) and by so doing rendered a great service to all those who encounter these tumors as well as all patients who grow them. The etiology remains unknown but I have learned a number of facts about them which I will pass on to you. Earlier this year when we had 46 of these tumors available, I made a superficial study of them and put together the following tables which furnish some interesting information about them. You observe they can develop at any age, that they are generally operated upon a relatively short time after they are discovered so that in consequence most of them are small. Although a majority are in the extremities, especially the upper extremity, they have developed elsewhere. Almost all are subcutaneous and many are adherent to the deep fascia. Possibly one reason that they are operated upon early comes from the fact that a number of them are painful and/or tender. They are remarkably harmless and apparently have little tendency to recur even if incompletely excised. I have not tried for follow-ups except in one case of a doctor's daughter for whom I was consulted and advised reexcision of the wound in the forearm because I thought the lesion was a liposarcoma. She had no further trouble after 3½ years. I obtained follow-up information in the cases of two physicians, both of whom had tumors removed and diagnosed as malignant elsewhere. In both cases they had had no further trouble and asked me to review the sections of their tumors because they were curious as to the nature of their malignant tumors. There is one more feature of interest to me in connection with these odd tumors. Although many have mistaken them for malignant tumors, I have yet to encounter a case in which a truly malignant tumor has been called fasciitis. I am waiting with great interest to find out if this will happen.

(continued)

Reference:

Konwaler, B.E., Keasbey, L. and Kaplan, L.:
Subcutaneous pseudosarcomatous fibromatosis (fasciitis).
Am. J. Clin. Path. 25: 241-252: 1955.

TABLES:

46 Cases of Fasciitis 1948-1959

Female-26 Male-19 Unknown-1

(1)

Age:	5 mo.-10 yr.	14 yr.	21-30	31-40	41-50	51-71	Unknown
	3	2	12	6	6	13	4

Size in Centimeters: 3.5 cm. or less..... 28
4-10.5 cm. 3
Not stated..... 15

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(2)

Upper Extremity..... 22 (Arm 8, Forearm 14)

Lower Extremity..... 13 (Thigh 7, Leg 5, Foot 1)

Trunk..... 7 Face & Neck..... 3 Vulva.... 1

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(3)

Diagnoses Made:

Malignant - 23
- Fibrosarcoma... 11
- Liposarcoma.... 8
- Malignant Tumor. 4

Benign - 12
- Fasciitis..... 6
- Other benign... 6

Not Stated - 11

Four symptom-free follow-ups: 16, 5, 3½, 1 years

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(4)

Duration of Symptoms: 1 month or less..... 17
1 - 3 months..... 10
Over 3 months..... 4
Unknown..... 15

Pain or Tenderness: Positive..... 11
Negative..... 5
Not stated..... 30

Arthur Purdy Stout, M.D.

APS:KS

Arthur Purdy Stout Society Seminar
New York City - June 13, 1959 Case 6 - P&S 62905

Diagnosis: Malignant Fibrous Xanthoma of Thigh with Inguinal Node Metastases.

MICROSCOPIC OBSERVATIONS:

This has such a confused histological picture that it is difficult to describe. It seems to me clearer in the metastasis than in the primary growth. In the metastasis the tumor has a so-called "storiform" appearance. There are cords of spindle-shaped cells running in various directions with a tendency sometimes to meet at a common point and be sharply deflected producing what I used to call a pin-wheel or spiral nebula effect. It differs however from the ordinary fibrous xanthoma which has this pattern because there are relatively few reticulin fibers accompanying the cells. It also differs because in addition to the spindle-shaped cells there are also peculiar rather small rounded cells. These are in much greater numbers in the primary tumor and so dominate the picture that the storiform pattern can only occasionally be recognized. Some of the cells are vacuolated and there is a good deal of brown pigment in some areas. The Scharlach R stain shows some foci of lipid-containing cells. An iron stain shows that most of the pigment is iron-containing. However in one area there is also a little black granular material and a short Masson-Fontana stain shows that none of the iron-containing pigment is blackened. The one area where the other stain showed black pigment is also present in the ammoniacal silver stain but nowhere else is there evidence of blackening.

DISCUSSION:

I found this malignant tumor very hard to interpret. After seeing the metastases and then again studying the primary tumor, I came to the conclusion that the only way I could put the whole thing together was to suppose that the tumor this woman had on the thigh for 20 years was a fibrous xanthoma or if you prefer sclerosing hemangioma. Eventually it took an accelerated growth vigor and metastasized. Since I have seen other cases I believed were malignant fibrous xanthomas, that sequence of events was not incredible in this case. It would explain the morphological picture of fibrous xanthoma evident in the metastasis and less evident in the primary tumor. The lipids and hemosiderin would fit in and the only difficult explanation is the black non-iron containing pigment. I thought this might represent the so-called lipomelanotic pigment such as one sees in sympathetic ganglion cells and in so-called melanosis coli. I presume the peculiar rounded cells that occur in considerable numbers in the primary tumor and sometimes contain hemosiderotic brown pigment are histiocytes, very possibly malignant ones. I abandoned any idea that this tumor was a melanoma. I would not want to call this a variety of malignant histiocytoma because that would not account for all the storiform areas which certainly characterize the tumor. I have finally decided to classify it as a malignant fibrous xanthoma.

Arthur Purdy Stout, M.D.

APS:KS

Arthur Purdy Stout Society Seminar
New York City - June 13, 1959 Case 7 - P&S 60252-63295

Diagnosis: Malignant Mesenchymoma of Larynx and Trachea.
(Hemangioendothelioma + organoid granular cell myoblastoma)

MICROSCOPIC OBSERVATIONS:

Until one appreciates the real features of this tumor it makes a great difference which section one looks at first. In some sections there seems to be a vascular tumor in which the cells lining the vascular spaces are anaplastic and tend to heap up. The neoplastic vessels also tend to anastomose freely. This picture seems uncomplicated except that stray acidophile granular cells appear between the vessels and sometimes in their walls. One might pass these over as disturbing but probably unimportant until, picking up another slide, one finds that another part of the tumor is almost exclusively composed of granular cells and the vascular element can hardly be detected at all. It might easily pass unnoticed if one had not seen the first slide. Further study shows that this is a two cell type mesenchymal tumor with the two elements inextricably intermingled. The granular cells are strongly acidophile and the nuclei vary from those with small nuclei characteristic of a benign tumor, to the larger plump nuclei and nucleoli of a malignant granular cell myoblastoma. In the metastases the same duality persists with sometimes one or the other type predominating.

DISCUSSION:

This tumor seems to be a conglomeration of malignant hemangio-endothelioma and malignant non-organoid granular cell myoblastoma. Two more unlikely playmates I can hardly imagine. As far as my knowledge goes, there has never been any real relationship between granular cells and vessels either in normal histology, in any non-neoplastic process, or in tumors. A great many suggestions have been made for the cellular origin of granular cells but as far as I know there has been no one who suggested they are derived from endothelial cells and per contra I never heard any one suggest that any kind of granular cells could give rise to endothelium. For a long time I used to be amazed at the versatility of mesenchyme in its ability to produce various kinds of tissue. I have come to expect anything from it since I realized what variable tumors it can form so that I no longer find any difficulty in recognizing and accepting this versatility. It does not very often happen, however, that a tumor keeps the two intermingled types so distinct both in the primary growth and in its metastases. In many, much of the tumor is undifferentiated and it is only here and there that one finds evidences of some differentiation in various directions. In this tumor, for example, it would not be possible to say that one element is a metaplastic change in the other. Both elements are primary and both are of equal importance.

Arthur Purdy Stout, M.D.

APS:KS

Arthur Purdy Stout Society Seminar
New York City - June 13, 1959 Case 8 - P&S 62695

Diagnosis: Squamous Cell Epithelioma of the Toe with
Mixed Tumor Metastases in Inguinal Lymph Nodes.

MICROSCOPIC OBSERVATIONS:

This tumor confused me so much that I led Phil Flynn astray as well as myself. I can now report to you what seem to be the positive findings and then discuss them. The tumor in the nail bed is a largely well differentiated squamous cell epithelioma which in the original section taken seemed to be quite limited in its invasion although less well differentiated in its deeper portions. This was the appearance of the biopsy from the toe. After amputation further sections of the toe from around the nail bed were taken. These showed that the poorly differentiated squamous elements invaded very deeply down to the periosteum but retained always the characteristics of a squamous cell epithelioma. There was one large metastatic node from the groin and some smaller ones. The large node bore no resemblance at all to the primary tumor; it was made up of units, short cords and masses of cells without evidence of any epidermoid differentiation set in a voluminous matrix of myxoid and cartilaginous tissue. The mucicarmine stain fails to show any intracellular mucicarminophilic vacuoles although of course there is a great deal of this material surrounding many of the cells. After careful study I also failed to find any of these tumor cells that had formed unquestionable glandular structures. Two of the other lymph nodes show metastases. In one the cords of cells resemble the parent tumor. In the other although most of the cords of cells resemble the parent tumor, here and there a few of them are associated with mucoid material.

DISCUSSION:

The reason I went astray on this case lies in the fact that the first sections I saw were the big lymph node and the biopsy section which showed only a very limited invasion of the nail bed. I could not believe that the inguinal node metastasis could possibly have come from the superficial epithelioma so I wrongly assumed there must have been a separate tumor in the toe which I supposed must have been a malignant mixed tumor of sweat gland origin. Gorman and I have prepared a paper on mixed tumors of sweat glands with the special object of trying to find out if they ever became malignant. In the entire world literature and in our own cases we could find none. You can sympathize with my excitement when this case came along. Although there is no evidence of a primary sweat gland tumor, the case is no less startling and unique in my experience for here is a tumor apparently a squamous cell epithelioma from the nail bed and without any evidence of peculiarity, metastasizing as a very good imitation of a malignant mixed tumor with cartilaginous and myxoid metaplasia. I have not combed the literature but certainly I am not aware of any case that has displayed such metaplastic agility. This case seems to me to have some bearing upon the question of the cellular origin of mixed tumors. This has always been a matter of speculation and debate. I think the majority of observers influenced by Masson and others feel that mixed tumors of the salivary glands are really altogether of epithelial derivation although of course there is no good explanation of why this should take place in connection with the epithelium of the ducts of the major and minor salivary glands and the sweat glands and nowhere else except for the neuroepithelial derivatives of the neural crest. In this case it makes one wonder if the epithelial cells of the primary tumor are somehow ontogenetically related to sweat gland duct epithelium in its ability to produce cartilage.

Ref: Stout, A.P. and Gorman, J.G.: Mixed Tumors of the Skin of Salivary Gland Type. (Cancer 12: 537-543, 1959)

Arthur Purdy Stout, M.D.

Arthur Purdy Stout Society Seminar
New York City - June 13, 1959 Case 9 - P&S 59739

CELLULAR BLUE NEVUS

Diagnosis: Compound Blue Naevus (Cellular Blue Naevus)
Malignant?

MICROSCOPIC OBSERVATIONS:

This is a complex tumor that is not easy to describe. In the central fibrous portion there are scattered elongated melanoblasts with brown pigment. This area fits the description of blue naevus. It quickly merges with a much larger area where the cells are all spindle shaped, closely placed, and without pigment. In some of these cords of cells connective tissue fibers are found between every cell. In other cords the cells grow without fibers between them. These latter cells are larger, plumper, and show occasional mitoses. Apparently no skin was removed with the specimen but supposedly it was not involved as the tumor is described as subcutaneous.

DISCUSSION:

This tumor poses a problem, the answer to which is still not clear to me. It has the characteristics of a cellular blue naevus because much of the growth shows connective tissue fibers between most of the cells and the melanin-containing cells are frequently elongated. But there are also solid cords of cells without fibers between them and there are foci where mitoses are relatively frequent. - sometimes as many as three in a single high power field. Throughout much of the tumor mitoses are not seen. These observations seem to indicate that this is not a pure blue naevus but a compound one containing melanoblastic cords similar to those found in epidermal moles, and the mitoses raise the question of malignancy. Some compound blue naevi have appeared to metastasize although I cannot now recall any that resulted in the death of the patient. I should like to call this a compound blue naevus and suggest the possibility of malignancy although I would not suggest a regional node renoval because of the uncertainty of their behavior. In the literature this type of tumor is most often referred to as a cellular blue naevus. Fisher reported one case that metastasized. It had been present in the occipital scalp of a 27 year old man for ten years. It had been growing larger for six years and had a metastasis in a cervical node. Excision of primary tumor and radical neck dissection were carried out. Six years later there were multiple subcutaneous and hepatic metastases proved by biopsy. Brandt reports the experience of the University of Helsingfors. They had seven cases of cellular blue naevi. Of these only one died apparently of a separate carcinoma so that he has no examples of cellular blue naevi metastasizing to lymph nodes. One developed a secondary nodule adjacent to the primary blue naevus and histologically similar which Brandt interpreted as a cutaneous metastasis. The patient was alive and well six years later. Of the six patients four remained alive and well more than five years after excision. This experience parallels our own.

As usual Allen and Spitz confuse the issue by making a distinction between malignant blue naevi and cellular blue naevi. None of the cellular blue naevi killed although several had metastases while of the malignant blue naevi two died with metastases and some of the others lived for years in spite of

(continued)

metastases. From the illustrations I would say that the malignant blue naevi that killed were certainly compound blue naevi with the epidermal type of cells furnishing the malignant element. One gets a much more sinister opinion of malignant blue naevi from Allen and Spits than from Brandt.

Arthur Purdy Stout, M.D.

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Brandt, G.: Melanoma of the skin. Ann. chir. et gynec. fenniae 45: Supp. 3: 1-128: 1956.

Fisher, E.R.: Malignant blue naevus. A.M.A. Arch. Derm. 74: 227-231: 1956.

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Arthur Purdy Stout Society Seminar
New York City - June 13, 1959 Case 10 - S.P. A-70475

Diagnosis: Malignant Melanoma of Nasal Cavity.

MICROSCOPIC OBSERVATIONS:

This tumor is composed of cords of rounded and sometimes elongated cells. Many of them contain melanotic pigment. The cords are separated by delicate strands of reticulin as demonstrated by the Laidlaw stain. Although it appears grossly circumscribed there is some microscopic infiltration. It will be noted that this tumor is far enough posterior to have developed in the glandular mucosa. It is also most interesting that in the vicinity of the tumor, the mucosa contains many branched melanoblasts in the surface epithelium and that occasionally they extend part way down into the ducts. Further there are many fat phagocytic cells immediately beneath the surface epithelium that are distended with melanin.

DISCUSSION:

The diagnosis in this case is obvious and the case is included in the Seminar because primary malignant melanomas in the upper respiratory passages are rare. One might expect to find them in the skin lining the anterior part of the nares. This case emphasizes the fact that melanoblasts can also be found in the glandular epithelium. There is a positive melanosis of the epithelial surface near the tumor. This melanosis does not appear to me to include any malignant cells. In 1954 Alexander published a case of malignant melanoma involving the septum and said he could find altogether reports of 94 cases of malignant melanoma in the nasal cavity and sinuses but some reports were very sketchy and he doubted if all of them were primary. Of these 25 were on the septum. Apparently the larynx is very rarely the site of a malignant melanoma. Curtiss and Kosinski reported one primary in the larynx and could only find references to two others. The Memorial Hospital experience recorded by Moore and Martin includes 9 in the nasal cavity and 2 in the larynx. All of the cases died. They have proved just as malignant as the ones in the skin. It is of some interest to me that I knew about malignant melanomas of the nasal cavity when I wrote Human Cancer for I have references in it to two cases. I even made the statement that metastases through lymphatics and blood stream from nasal cavity and sinus cancers are rare except in the case of malignant melanomas which seems still to be true.

Arthur Purdy Stout, M.D.

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Arthur Purdy Stout Society Seminar
New York City - June 13, 1959 Case 11 - S.P. A-72725

Diagnosis: Malignant Melanoma of Lung (Metastatic?)

MICROSCOPIC OBSERVATIONS:

The slide distributed shows a tumor of solid consistency composed of deeply stained cells varying from a rounded to a short spindle shape. They do not seem to have any definite pattern and the reticulin stain seems to support this statement for fine reticulin fibers course among the cells surrounding many and only occasionally are two or three found packed together without reticulin fibers between them. On the section distributed, all other special stains used were unrewarding; mucicarmine, iron, trichrome and Masson-Fontana. I hunted through 40 high power fields before I could find one mitotic figure. With the biological information furnished in the history and the histological appearance in this section, I feel completely baffled by this tumor. It does not appear like any primary tumor of the lung with which I am familiar and if it is a metastasis I could not guess from what. Because of the reticulin pattern it seems more like a mesenchymal growth than an epithelial tumor but if so what can it be?

At this point it is necessary to reveal that other blocks give additional information. We were unable to give slides showing this to you because this is the only block from which enough sections could be prepared for distribution. In other parts of this tumor there are a good many cells containing melanin pigment. It is certainly melanin for it is blackened by the Masson-Fontana stain and the intracellular granules are very fine and non-refractile. Many of the cells containing melanin have long processes which can be detected because of the granules. They were not apparent in the other stains.

DISCUSSION:

Although we now know that this tumor contains melanoblastic cells, it seems to me we still have a difficult problem on our hands to explain it. For what kind of a melanoma is it? With almost all the cells surrounded by reticulin fibers, the tumor does not look at all like an ordinary malignant melanoma. It might conceivably be a metastatic malignant blue naevus but there is nothing in the history which points to this, although it seems possible that if the hemorrhoids removed in 1951 were not examined, one of them might have contained a malignant melanoma, possibly of the malignant blue naevus type. This conceivably might be a metastasis from such a lesion. The literature contains some examples of melanotic metastases removed from the lung (Ehrenhaft; Hood et al). Can this be a primary malignant melanoma of the lung? I have not searched diligently, but I am not acquainted with any reports of such a phenomenon. If the reports of primary malignant melanoma in the esophagus can be credited which is not certain, it is not impossible for there to be such a tumor in the lung, for both the esophagus and the lung are derivatives of the foregut. The probabilities favor explaining this melanotic tumor as a metastasis from the anus or elsewhere but it is conceivable that it is primary.

Arthur Purdy Stout, M.D.

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