

of the uteri and the rectum descended between them in relation to the posterior surface of each.

Intestinal canal: Small intestines in two sets, one for each fetus. Until near the cecum they united forming a large intestine or colon; sigmoid flexure and rectum common to both.

The appearance of the external parts are peculiar. The coccyx of each protrudes, forming a process about the size of a filbert. In normal relation to each is an anal depression or pit, directly between which is located a perfect anus common to both children. To the right and left of the perfect anus are the rudimentary pudenda. The extremities, upper and lower, are well developed and the heads well shaped.

#### DISCUSSION.

Dr. JOSEPH B. DELEE—This is a very interesting and unusual monster, the termination being favorable to the patient. When we consider the immense amount of dystocia monsters like this can cause, and the difficulties attending diagnosis and treatment, we can not but congratulate the Doctor. It is a peculiar fact that double monsters are said to cause much less dystocia than single ones. Professor Hohl in 1850 collated the statistics on the subject and found that 55 per cent. of single monsters caused dystocia, while only 38 per cent. of double monsters caused it. One reason is that single monsters are so likely to have displacements, such as transverse and other positions, and a large number of this class of monsters is due to hydrocephalus and enlargement of the abdomen or other cavities. Whereas double monsters will abort frequently, single monsters go to term. I remember in Berlin to have seen an abortion of three months in which there was a perfect miniature representation of the Siamese twins. The two fetuses were united together at the xyphoid appendix. In regard to the diagnosis of the double monster, there is hardly a case in which a diagnosis of it is positively made before labor. The majority of cases have gone to labor, and only when there has been obstruction has a diagnosis been made. Even then, a number of cases are difficult to diagnose, particularly where there are twins, one across another, or the two heads entering the pelvis at once or two breeches. In a single monster the diagnosis is easier. I have seen a diagnosis made of anencephalus through the abdomen by determining the breech in the fundus and no head over the inlet.

The Doctor has dealt with the division of monsters largely from a pathologic aspect. What has interested me in studying double monsters is the clinic aspect, because it is more important to the practitioner. G. Veit has written a monograph on the subject. He divides monsters into three forms. First, those where fission begins on top. The top of the monster is divided into two parts, either two heads or two faces stuck together, or the division proceeding further down, so that there are two complete heads with either one or two arms on each side. The second division is monsters united by fusion: Craniopagus, either front or back, vertex or face, ischiopagus. I think the Doctor's case was an ischiopagus in which there was dystocia of a double monster. Being united end to end, the children should have been delivered one after the other but for some reason they became doubled up like an U and thus offered almost insuperable obstruction to labor. The third division comprises monsters with a point of union near the middle of the trunk. The fission is both from below upward and above downward. Example, the Siamese twins.

In the treatment of this form of dystocia the plan works nicely also. First group, fission at either end, for example, a diprosopus (two faces). Here you would do a version or craniotomy, it being simply the size of the part causing a mechanical disturbance. In general, breech presentation is more favorable in labor with monsters, because there is something

to pull on. The second division of the first class, where the fission is from below, the dipygus, there being two to four legs. In general, traction on one or two legs will not bring the others down; you must get all there are and make traction on them.

The second class of monsters, where the bodies are joined end to end, seldom give trouble, as they slip through as a long cylindrical mass. This was the case of the ischiopagus monster exhibited in the museums here about six years ago.

The third division, the thoracopagi, the xiphopagi, give the most trouble. Since the band of union is often very movable it is possible to deliver one child by version and extraction and then the other likewise. Or in certain cases, bring down all four extremities, now deliver the rear child, then the other. Generally, it is a bad plan to amputate the parts which are born; true you get more room, but it disturbs the relations of the parts and you lose a good handle on which to make traction.

### PRIMARY SARCOMA OF THE TAIL OF THE PANCREAS.

Read before the Chicago Pathological Society, June 8, 1896.

BY FRED. J. E. EHLMANN, M.D.

LATE HOUSE PHYSICIAN COOK COUNTY HOSPITAL, CHICAGO.

Sarcoma has been found in almost all parts of the human body where mesoblastic tissue occurs. The frequency of its place of origin, however, varies greatly so that sarcomata in some locations are common, in others almost unknown. Thus primary sarcomata of the bones, eye, kidney, glands, brain, etc., occur with relative frequency, but primary sarcoma of the pancreas, for instance, is very rare. This statement is substantiated by our best known writers, some of whom emphasize their rarity; others make no reference to primary pancreatic sarcomata at all. Thus Ziegler<sup>1</sup> writes that such growths are extraordinarily rare and Orth<sup>2</sup> says that primary sarcoma of the pancreas is almost unheard of.

To show the relative frequency of tumors of different varieties occurring in the pancreas, I may refer to Segre's<sup>3</sup> table of 11,492 autopsies with 132 pancreatic tumors, of which 127 were carcinomata, 2 were cysts, 2 were sarcomata, and 1 a syphilitic growth. Segre fails to state, however, whether the sarcomata were primary or secondary.

Some of the reports leave doubt as to the real nature of the tumor. Thus E. H. Bartley<sup>4</sup> reported a case in 1880 of a patient who had vomited after meals, complained of pain in the epigastrium and emaciated rapidly. The tumor was "a spindle-celled growth, probably a carcinoma of slow growth, a scirrhus cancer, or possibly a spindle-celled sarcoma." Bruen<sup>5</sup> in 1883 and C. Workman<sup>6</sup> in 1892 described tumors of the pancreas, leaving doubt as to their real pathologic nature.

In 1883 Chiari<sup>7</sup> reported a fair-sized sarcoma of the pancreas, but considered it secondary. The patient was 43 years old, and the tumor is described as "a globular tumor in the head of the pancreas, soft, fragile, brownish-black, within a 2 mm. thick capsule through which the tumor-mass protruded here and there. There was also a brownish tumor in the omentum, in the fossa iliaca sinistra, and in the left eye, which probably was the primary tumor." Microscopic-

<sup>1</sup> Ziegler: *Lehrb. d. sp. Path. Anat.* 1892, 619.

<sup>2</sup> Orth: *Lehrb. d. sp. Path. Anat.* 1887, i, 904.

<sup>3</sup> Segre: *Schmitts Jahrb.*, Nov. 15, 1889.

<sup>4</sup> Bartley: *Annals Anat. and Surg. Soc.* 1880, ii, 495.

<sup>5</sup> Bos. *Med. and Surg. J.*, 1883, cviii, 110.

<sup>6</sup> Glasgow *M. J.*, 1892, xxxvii, 385.

<sup>7</sup> Virchow: *Hirsch Archiv*, 83, ii, 211.

ically the tumor consisted of spindle cells with brown pigment.

Litten<sup>8</sup>, however, is the first one to report a primary sarcoma of the pancreas. This occurred in a boy 4 years of age, who complained of tenderness over the abdomen and occasional diarrhea. On examination a tumor, which filled the entire abdomen, was visible through the abdominal wall. Nothing is said of the exact location in the pancreas of this tumor. Microscopically he found a small, round-celled sarcoma.

In the following year Briggs<sup>9</sup> reported a case where bloody vomit, fatty stools, emaciation, ascites and a fixed epigastric tumor existed. The ascitic fluid was alkaline, turbid dark brown, of 1012 sp. gr. The pancreas, which was removed by operation, was examined with the following result: "A sarcoma, although there is evidence of a preëxisting hydatid shown by the hooklets of the affection, with the cells of a spindle-celled sarcoma." In 1892 Garda y Mansilla<sup>10</sup> also reported a sarcoma of the pancreas.

Of these seven cases the diagnosis is exceedingly doubtful in three; in the remaining four sarcomata existed and of these two were primary, one possibly primary and one secondary.

It will have been noticed that where the location of tumors has been specified the head of the pancreas was their seat. The case of which I make a report is a round-celled sarcoma of the tail of the pancreas. The history is as follows:

A. G., a German widow, 56 years of age, a washerwoman, resident of the United States for thirty-two years; had had a sense of weight in her epigastrium, frequent attacks of anorexia and occasional dyspnea for two years. Weakness gradually progressed so that she had been almost completely incapacitated for work some months before her admission to the hospital, on Sept. 15, 1895. Three weeks before admission a dull, continuous pain began in the epigastrium accompanied by a slight cough with frothy expectoration, a dull pain over the anterior surface of the chest, aggravated on deep inspiration, constipation, pollakiuria and dysuria.

The family history was negative. She had had typhoid fever twice. She had given birth to three healthy children; never had a miscarriage nor any puerperal fever.

The examination made the day following the day of admission, showed the following: Mind clear; skin dry and subicteric; nourishment fair; eyes sunken, pupils equal and reacting to light and accommodation; tongue heavily coated with somewhat dry margins.

Heart: Apex beat plainly visible in the fourth interspace, somewhat to the right of the left mammary line; the beat fairly strong on palpation. The right border of the heart was at the middle of the sternum, the upper border in the second interspace, the left border at the mammary line. The sounds were muffled, but no murmur could be heard.

Lungs were resonant and the breath sounds audible all over, except below the ninth rib posteriorly on the right side. There were few crepitant râles in the axillary region of the left lower lobe. The epigastrium was more prominent than normal and quite tender.

Liver extended from fifth rib to a point four finger breadths below the costal arch in the right mammary line, and reached beyond the left mammary line to the left. Palpation revealed a hard, nodular border near the right iliac crest, whence it could be followed to a point about an inch above the umbilicus, where a large notch was present. From this point the border descended to the left to a level with the umbilicus and continued on this level beyond the left mammary line. The entire margin moved with inspiration. Beneath this edge to the left of the umbilicus there was a distinct, firm, tender mass, about the size of a chicken's egg, which did not descend on inspiration and could not be displaced upward.

The bones of the body were negative. The glands of the lymphatic system were not enlarged and no edema existed.

On admission the temperature was 100.6 degrees F. and four hours later reached the highest point recorded, 102.8 degrees.

The respirations varied from 30 to 36 and the pulse from 96 to 120. Preceding her death, which took place on Sept. 25, 1895, the temperature became subnormal. No sugar was found in the urine and the feces were never examined.

The postmortem examination was made sixteen hours after death. The body was fairly well nourished; skin subicteric; there was the usual posterior lividity in moderate degree.

The heart was larger than its owner's fist and flabby; subepicardial fat was abundant on the anterior surface and along the course of the vessels petechiæ were to be seen. The mitral orifice admitted three finger tips, the tricuspid four. Both semilunar valves were found competent to the water test. The free margins of the aortic valves were thickened. The left ventricle was 7 cm. deep and its wall measured 1.5 cm. in thickness on the average. The right ventricle was 8 cm. deep and its wall averaged a thickness of 3 mm. The myocardium was pale. The aorta was slightly dilated, the intima thickened in areas.

The pleural cavities were free from adhesions. The right contained about 6 ounces of clear, straw-colored fluid. On the visceral pleuræ of both lungs there were quite firm, whitish areas of about 2 mm. diameter. The lungs had pale, translucent margins and contained a quantity of frothy fluid. The right lung was adherent to the pericardium.

The peritoneal cavity contained a considerable quantity of straw-colored fluid. The peritoneum was smooth and shiny.

The liver reached almost to the right iliac crest and almost to the umbilicus in the median line. It weighed 5590 gms. It measured 35 cm. from right to left; the right lobe measured 32 cm. from above downward, while the left measured 22 cm. The liver was 13½ cm. thick. A deep and wide furrow extending transversely over the anterior surface of the right lobe permitted of great mobility of the lower one-half on the upper. The surface of the liver was grayish and was studded with slightly raised, firm areas, varying from the size of a pea to that of a walnut. Similar areas were found throughout the parenchyma of the liver; some were pale and hard, others had a dark periphery and a softened, pale center and all could readily be peeled out.

The stomach was completely covered by the liver. At the cardiac end it was adherent to a tumor-mass behind and below it. Its wall was not infiltrated as far as could be seen with the naked eye, and its mucous membrane was normal. The intestines were normal.

The tail of the pancreas merged into a tumor-mass situated in the region of the left suprarenal capsule. After the organs of this region were taken out *en masse* it was found that the kidney, suprarenal and spleen could be readily and completely removed. The tumor was nodular, measured 7 x 7 cm. and was quite firm. The cut surface showed a pale lower half which was distinctly continuous with the pancreas; the upper one-half was of a pinkish color. The spleen was negative.

Both kidneys were of about normal size; the capsules were adherent; the cut surfaces were pale and the cortical markings were indistinct. The renal pelvis, ureters, bladder and suprarenal capsules were normal.

The uterus had a pedunculated, pea-sized body protruding from the os, which was connected with the cervix. The ovaries were hard and almost cartilaginous. The nervous system was not examined. Enlarged glands were found at the celiac axis.

The anatomic diagnosis was: Pulmonary emphysema and edema; fatty heart; atheroma of the aorta; adhesive pleuritis; chronic nephritis; uterine polypus; atrophic ovaries; primary tumor of the tail of the pancreas; secondary tumors of the liver and pleuræ; secondarily enlarged celiac lymphatic glands.

The microscopic examination showed the tumor in the tail of the pancreas to consist of small round cells without any definite arrangement, imbedded in a stroma which in places was very finely fibrillated, in others more coarse and fibrous. There were large vascular channels and areas of hemorrhage throughout the tumor. The nodules in the liver and the pleuræ showed the same structure.

**Conclusion:** In the foregoing has been described a small round-celled sarcoma of the tail of the pancreas with secondary tumors in the liver. It is believed that the primary tumor originated in the substance of the pancreas, because of the intimate connection between the pancreatic tissue and the tumor, which appears to be continuous with and to replace the structure of the pancreas. The tumors in the liver and pleuræ were manifestly metastatic and

<sup>8</sup> Deutsche Medizin. Zeit. Oct. 22, 1889.

<sup>9</sup> St. Louis M. and S. J., 1890, lviii, 154.

<sup>10</sup> Garda y Mansilla: Progreso med. e farm., Madrid, 1892, i, 77.

the logical conclusion would be that in the absence of any other primary tumor-focus this case will have to be interpreted as one of primary sarcoma of the pancreas.

On account of this very unusual location of the sarcoma, it was concluded that the case merited the forgoing brief report.

### LIPOMA DEVELOPED IN THE UPPER END OF THE SEMITENDINOSUS MUSCLE.

Read before the Chicago Pathological Society, June 8, 1896.

BY GEORGE H. WEAVER, M.D.

Professor of Pathology Northwestern University Woman's Medical School; Instructor in Bacteriology Rush Medical College, Chicago.

CHICAGO, ILL.

This specimen is presented, not because of its being a lipoma, but since it is interesting from its location and considerable size. There is no clinic history of the case and the tumor was discovered accidentally in a subject in the dissecting room of Rush Medical College during the winter of 1893. A student called my attention to a swelling in the upper and posterior part of the thigh of a male subject, which he had not noticed until after the removal of the integument. As it appeared with the covering of fasciæ an abscess was suspected. There was a sensation on palpation suggesting fluctuation, which was felt transversely through the tumor, but not in the vertical direction. On dissecting down to the tumor it was found to be located in the semitendinous muscle at its upper end, extending from the insertion of the tendon to the tuberosity of the ischium downward. The muscle separated easily and naturally from the surrounding structures. The tumor was oblong, five inches long and three inches in diameter transversely at the center. Its surface was smooth and even, and covered everywhere by the fibers of the tendon and muscle, which had been uniformly spread out over the surface. On section it was found to be a lobulated lipoma. A small calcareous nodule was located in the upper part at some distance from the bone. Ziegler (*Lehrbuch der Speciellen Pathologischen Anatomie*, Jena, 1890) places lipoma of muscles among the uncommon tumors. Sutton (*Tumors, Innocent and Malignant*, 1893, Philadelphia) says that many examples of fatty tumors occurring in the midst of muscles have been reported and are of interest from the trouble they cause in diagnosis. He says they have been found in the deltoid, biceps, humerus, complexus and rectus abdominalis, in the muscular tissue of the heart and in the middle of a submucous myoma of the uterus. Senn (*The Pathology and Surgical Treatment of Tumors*, 1895, Philadelphia) says that lipoma inside the tendon sheath springs from the adipose tissue of the mesotendon, and that it usually develops as a multiple tumor which presents an arborescent appearance and is easily mistaken for tuberculosis of the tendon sheath and for flexiform neuroma. The present instance does not correspond to the variety described by Senn, and does not differ in its appearance from a lobulated lipoma in the subcutaneous tissues. From its deep location and the sensation of fluctuation imparted to the fingers on palpation, it might readily have been mistaken during life for an abscess.

**Chair of Massage.**—The *Progrès Méd.* mentions as a fact unique in Europe that the University of Berlin has created a professorship of massage and orthopedia.

### THE DEGENERATE JAWS AND TEETH.

Read in the Section on Neurology and Medical Jurisprudence, at the Forty-seventh Annual Meeting of American Medical Association, held at Atlanta, Ga., May 5-8, 1896.

BY EUGENE S. TALBOT, M.D., D.D.S.

FELLOW OF CHICAGO ACADEMY OF MEDICINE.

(Concluded from page 1202.)

Modification of the V-shaped arch results from modification of the above named conditions. A difference in the time of eruption of the cuspids, everything else being equal, effects a difference in the space left for their accommodation and thus partial V-shaped arches (Fig. 55) are found. The keystone, the cuspid, is not entirely outside or inside of the arch in the partial V-shaped form, but may appear partially crowded out of place. Hence, the arch is neither a normal curve nor wholly angular, but unites the characteristics of both. Its lateral diameter is less than that of the normal arch, giving a contracted

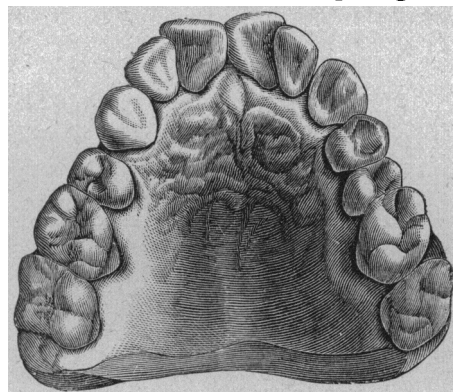


Figure 55.

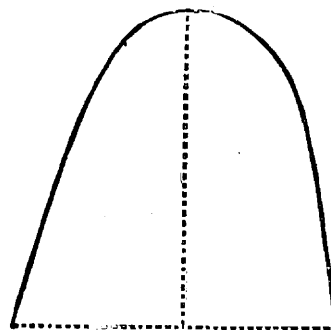


Figure 55.

appearance. Thus a number of varieties of the fundamental forms of the V-shaped arch are formed differing in degrees of anterior contraction. All of these result from the comparative thinness of the anterior portion of the process offering but little resistance, an abnormal pressure from behind, and the greater strength of the cuspids which cause them to seek room irrespective of the space left for them. When one side of the process near the symphysis is the stronger, thus affording greater resistance, or the pressure from the cuspid is less, that side may maintain its normal relations, while the other may give way to conditions resulting in a V-shaped contraction. The curve will then be broken not at the apex of the triangle, but near it, the incisors will overlap, and when pressure from the cuspid acts on the weaker column it must give way. This results in the semi-V-shaped form (Fig. 56). When the permanent bicuspid erupts under a favorable condition, so that their greatest diameter is in a line with the greatest