A CASE OF COLLOID CARCINOMA OF THE SKIN

A. BAMBERGER, B.S., M.D.

Resident Physician, Cook County Hospital
CHICAGO

I report this case, first, because of its rare occurrence, as I am unable to find a similar condition reported in literature, and secondly because it emphasizes the importance of laboratory work in cases of obscure diagnosis.

History.—Miss C. G., unmarried, aged 35, a clerk, entered my service at the Cook County Hospital, June 8, 1910. She had always lived in Chicago and was apparently of good habits. Menstruation began at 14 years, was regular and of the twenty-eight-day type.

Present Illness.—The patient stated that two weeks before entering the hospital a blister appeared on the lower third of the right leg and that after a few days it opened, and an ulcer followed, for which she sought treatment. She denied having injured the leg or having applied any drug locally. With the exception of the ulcer she said she was in good health.

Past History.—She was well up to the present illness, except that her legs occasionally swelled, which condition a physician told her was due to nephritis. She had diseases of childhood and malaria ten years ago, but denied typhoid and all venereal infections. Family history was negative, except that the patient's mother died of heart disease.

Examination.—The patient was an obese white woman, quite nervous, but apparently having no pain; no cyanosis or icterus. The pupils were equal, reacted to light and accommodation; the mouth was negative, except for a few decayed teeth; there was no thyroid enlargement. The lungs were negative. The heart showed no enlargement; tones strong, regular, no murmurs. There were no ascites, no abdominal masses, no tenderness on palpation. The liver was not enlarged; the spleen not palpable. The lower half of the right leg was edematous. About 2 inches above the ankle was a superficial, irregularly shaped ulcer about 2 inches in diameter. The parts surrounding the ulcer were inflamed and tender. The femoral glands of the right leg were moderately enlarged; there was a slight varicosity of veins of both legs; pulsation of posterior tibial and dorsalis pedis was less marked on the right than on the left leg. The uterus was in good position and not tender; there were no masses or tenderness in pelvis. Knee-jerks were present; Romberg and Babinski absent. The urine was clear, amber, specific gravity 1020, acid, no albumin, sugar, casts, leukocytes or red-cells. Blood examination showed 15,000 leukocytes; no malarial parasites.

Course of the Disease.—On first examination I thought the condition was a dermatitis with infection and ulceration, and accordingly applied hot dressings, which failed to alleviate the symptoms. During the first three weeks in the hospital the patient ran an irregular temperature, ranging from 99 to 101 F., with no special evening rise. The ulcer gradually extended until it involved the entire anterior third of the leg and laid bare the tibia. It was very foul and sloughing. On the ninth day after admittance a bluish discoloration of the toes appeared which gradually increased in intensity and extension until there was a well demarcated gangrene of the entire foot and lower third of the leg on the twenty-second day. The leg was then amputated just below the knee. During the patient's entire stay in the hospital she had a severe diarrhea of greenish, liquid stools, containing small amounts of blood, but no parasites, and also continually lost weight. After the operation the patient grew steadily worse, the diarrhea becoming uncontrollable and the emaciation being very rapid. Three weeks after the operation she became irrational and very weak, and three days later, on the forty-sixth day after admittance, died. I was uncertain as to the cause of death and as no post-mortem examination was permitted I made the tentative diagnosis of tuberculous enteritis.

Pathologic Finding.—At the time of amputation I excised a piece of the involved tissue for examination, which the hospital pathologist diagnosed as colloid carcinoma.

As colloid carcinomas occur most frequently in the intestines it is most probable that the patient had a colloid carcinoma of the intestines with a secondary growth in the skin.

THE PATHOLOGY OF JOINT TUBERCULOSIS:
TUBERCULOUS SINUSES

LEONARD W. ELY, M.D.

DENVER

In numerous articles in the past I have called attention to the importance of avoiding secondary infection of the walls of tuberculous sinuses and abscesses by the germs of suppuration, and have pointed out the danger the patient incurs if this secondary infection take place. In this I have followed the teachings of others and my own experience, an experience gathered in treating many cases of joint tuberculosis. On the other hand, the custom of opening, scraping and packing tuberculous abscesses is still widespread, and those who practice it do so either from ignorance or because their experience teaches them that it is correct. Now, the experience of one man may be said to be as good as that of another, and until we can bring proof to sustain us we shall hardly convince our opponents. A very suggestive case of tarsal tuberculosis has recently furnished us with additional evidence of the truth of our contentions, and I shall quote it at length. Before doing so, however, I wish to call attention to one or two points in the pathology of joint tuberculosis.

Pure tuberculosis does not, possibly with very rare exceptions, attack ordinary connective tissues of low grade of organization. They must contain some peculiar cellular elements in addition.

The red or cellular marrow of bone and the cellular synovial membrane, tendon sheaths, lymph nodes, epithelial structures, etc., are vulnerable; but cartilage, ligaments, fatty or yellow marrow, fibrous connective tissue, etc., escape direct infection. If, however, a secondary infection by pus germs be added, tissues that were immune before, now are open to attack.¹ An ordinary tuberculous abscess, starting from a focus in a bone, making its way toward the surface along the fascial planes, travels along a path of ordinary fibrous tissue which is not open to attack. So long as these abscesses remain uninfected the patient does not suffer from constitutional involvement nor from other symptoms except possibly those due to pressure. If a secondary infection be added the entire picture is changed, and forthwith the constitutional symptoms of pain, fever, etc., become prominent, the danger to the patient is greatly increased and his chances for recovery are seriously impaired.

What is the reason for this? Why are these tracts once infected so difficult to heal? No matter how vigorous our method of drainage, their course is never that of a simple infected abscess. They may exist for years. One reason is that the secondary infection has changed what was a small localized tuberculous focus into a widespread tuberculous area, and has added a mixed infection. In an old tuberculous sinus tubercles may be seen under the microscope deep in the walls, inaccessible to any curette, but in an uninfected sinus no tuberculosis is present. In other words, the walls of an uninfected

1. Ely: Surg., Gynec., and Obst., July, 1910.

tuberculous sinus are not tuberculous; the walls of an infected tuberculous sinus are tuberculous. By permitting infection of a sinus with pus germs we are at the same time infecting it with tuberculosis. This fact, though not new, is not generally known. The following case illustrates it:

The patient was a man of forty-four years, a driver. He had suffered from pain and disability of his right foot for twenty months, and these symptoms had increased to such an extent that he was compelled to go about on crutches. He had been treated with plaster of Paris and strapping, and had never had any open sinuses. Examination showed moderate swelling over the dorsum of the foot, and considerable sensitiveness to pressure. The foot was in eversion. The lungs were involved. The evidences of the disease were so small that the wisdom of an amputation was doubted, but, acting on the theory that tarsal tuberculosis in the adult seldom if ever is cured without an amputation, and especially in view of the patient's pulmonary disease, this operation was decided on and was performed at the Roosevelt Hospital. During the performance of a Syme's amputation, the knife of the operator cut through a sinus on the dorsum of the foot, leading upward, but not communicating with the surface. From this sinus pus oozed.

By courtesy of the house staff I secured the specimen. On dissection it was found that the comparatively mild symptoms were caused by an extensive tarsal tuberculosis which had involved two of the tarsal joint cavities with their ramifications, and the talus, navicular and cuneiform bones. The cartilages were roughened, mottled and eroded at their periphery. The synovial membrane was thickened and inflamed, and showed under the microscope typical tuberculosis, but the walls of the sinus from this tuberculous lesion showed, not tuberculosis, but the ordinary evidences of inflammation—round cells, polymorphonuclears, edema, arterial thickening, dilated capillaries, etc.

If one will picture to himself this extensive bone tuberculosis penetrating the bones of the tarsus, covered up as it is by ligaments running in every direction, with numerous tendons passing over these, and with blood vessels and nerves added, he will appreciate the utter absurdity of an attempt by a partial operation to eradicate under all these a disease of whose extent he cannot possibly have any idea. Any other operation than an amputation would have been worse than useless.

440 Humboldt Street.

Special Article

TYPHOID FEVER IN DETROIT

BY THE SPECIAL COMMISSIONER OF THE JOURNAL

The reports of the municipal board of health show that in certain years typhoid fever has prevailed in Detroit to an extent that must be called excessive. The death-rates from this disease for 1887, 1888, 1892, 1893 and 1907 are so high that they might well have been the occasion for grave concern to the inhabitants of any modern civilized city. The facts are set forth in Tables 1, 2 and 3.

NATURE OF THE AVAILABLE STATISTICS

Other than these bare records of deaths, there is little to throw light on the extent, distribution and age incidence of typhoid fever in Detroit. The first report of the health department was published in 1882; so late as 1894 we find 83 deaths recorded under the head of "febris," and in a footnote these are said to include: "febris intermittens 8, pernicio 1, puerperalis (1) 10,

remittens 4, typhoides 64, typho-malaria 6;" it was not till 1904 that typhoid fever was added to the list of diseases that must be reported to the health officer. Even now it is plain that only a small proportion of the typhoid fever cases are regularly reported to the authorities. In 1905-6, 70 deaths and only 87 cases were reported. It may be recorded in passing that the system of recording vital statistics on the basis of the fiscal year (July 1-July 1) rather than the calendar year does not facilitate comparison with conditions in other cities.

It must not be supposed that Detroit is peculiar in most of the practices above mentioned. Until recently few American cities have had a satisfactory system of nomenclature, and certainly very few have at the present time any adequate record of typhoid fever cases. Detroit can hardly be said to be much different in this respect from the average American city of its class.

An exception must here be noted to the aforesaid meagerness of record. One particularly severe outbreak

TABLE 1.—TYPHOID DEATH-RATES, DETROIT, 1886-1909

Year.	Population.*	No. Deaths.†	Deaths per 100,000 pop.‡
1886	176,001	67	39.4
1887	179,015	116	64.0
1888	187,986	86	45.9
1889	196,922	60	30.5
1890	205,876	39	19.0
1891	213,859	73	34.1
1892	221,842	208	93.8
1893	229,825	97	42.2
1894	237,808	67	28.2
1895	245,790	61	24.2
1896	253,773	57	22.5
1897	261,756	38	14.5
1898	269,739	58	21.5
1899	277,722	35	12.6
1900	285,704	50	17.5
1901	303,710	58	19.1
1902	321,716	60	18.6
1903	339,722	53	15.6
1904	357,728	58	16.2
1905	375,735	63	16.7
1906	393,741	80	20.3
1907	411,747	100	24.3
1908	429,753	87	20.2
1909	447,759	94	21.0

* Population of 1880, 1890, 1900, 1910, U. S. Census. Intervening years calculated by "arithmetical" method (Twelfth Census Bull., No. 135).

† Number of typhoid deaths recorded in reports of health department.

‡ Rates computed directly from populations and typhoid deaths given in this paper.

TABLE 2.—AVERAGE TYPHOID DEATH-RATES BY FIVE-YEAR PERIODS

1886-9	45.2	1900-4	17.4
1890-4	43.5	1905-9	20.5
1895-9	19.1		

of typhoid fever—in 1892—was made the object of special investigation by a competent observer,¹ and his conclusions were published in a supplement to the annual report of the Michigan State Board of Health, 1898.

THE CAUSE OF THE 1892 OUTBREAK

The extensive epidemic of the summer of 1892 carried the typhoid death-rate for that year to the highest figure known in the sanitary history of the city (93.8) and is one of the severest recorded in any American city during the last twenty-five years. Professor Williams' careful study of the distribution of the deaths and the age of the decedents, together with other data, led him to the belief that nothing but the public water-supply could be the general vehicle of infection. All the facts obtainable at the time pointed to this conclusion, and it is indeed difficult to explain so explosive an epidemic and one of such magnitude in any other way. The discussion that followed the reading of Professor Williams' paper in the sanitary convention at Detroit in December, 1897,

1. Gardner S. Williams, at the time civil engineer to the Board of Water Commissioners of Detroit.