

cites cases related by Haltenhoff, Mikulicz, and Gordon Norris, in which were similar growths of upper lids, parotid, and other salivary glands.

At the last Dermatological Congress, Peltauf and Riehl discussed the question of leukæmic skin tumors from a pathologico-anatomical standpoint.

Fuchs (quoted by Fröhlich) mentions the case of a man, aged sixty-one, who had for two years large lymphoid growths of upper lids, and Kaposi (*Jahrb. d. Ges. d. Aerzte*, 1885), one of lymphoderma perniciosum in connection with leukæmia.

Birk (quoted by Fröhlich) has called attention to a double exophthalmus dependent upon lymphomatous new growths of the back part of the orbit, but it is not stated whether leukæmia was present.

Hochsinger and Schiff (*Vierteljahrsschr. f. Dermat. u. Syph.*, 1887) mentions a case of leukæmia in an eight-months-old child, in which were lymphomatous growths involving head and skin.

Ziem (quoted by Fröhlich) cites a case of symmetrical swelling of both upper lids causing ptosis, in a man aged thirty, associated with enlargement of parotid glands, lymphatics of neck, of axilla, and orbital gland. Spleen not enlarged. Examination of blood showed nothing abnormal. A microscopical examination of a piece of the tumor showed quantities of granulative tissue. In the centre of the tumor was a tendency to cheesy formation, without the presence of tubercle bacilli. An intercurrent attack of erysipelas caused the tumors almost to disappear, but they returned after the attack subsided.

## NEURALGIA OF THE RIGHT CRANIAL NERVE OF SIXTEEN YEARS' DURATION; EXCISION OF THE THREE DIVISIONS AT THE GASSERIAN GANGLION; DEATH.

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AND

E. J. BAKER, M.D.

### HISTORY AND EXAMINATION BY DR. ESKRIDGE.

ERNEST G. G., aged fifty-two years, farmer, was brought to my clinic at the Medical Department of the University of Colorado, early in July, 1892. The family history shows freedom from insanity, epilepsy, neuralgia, and consumption. The father and mother lived to advanced age; the cause of their death is unknown.

The patient was always well and strong until 1876, when he cut his left wrist with a piece of pottery. A violent cellulitis involving the entire forearm resulted, numerous abscesses of the arm developed; he was

considerably reduced in strength, and confined to his bed for a period of six weeks. He stated that he apparently completely recovered from the results of the wound, but that a few months later, his body, while over-heated, was rapidly cooled by a draught of air. The next day after the exposure he suffered from severe neuralgic pain in the right side of the face. The pain was paroxysmal, and most intense in the teeth and the right eye, although the entire right side of the face was involved to a slight extent. No pain was experienced in the distribution of the fifth cranial nerve over the scalp. The attack lasted six weeks. He was free from pain for a year, when he had a second seizure, lasting only a few days, in which pain was limited to the right side of the face. For several years he suffered from one or two seizures of neuralgic pain each year, but the attacks returned more frequently, became longer in duration, and the pain was more severe as time wore on, until six or seven years ago, when he was suffering about half the time. During the last three years the pain in the face has been constant. One year ago he began to suffer from severe pain in the large joints, and these have swelled considerably.

*Status præsens*: He has a large frame, but is thin, and presents evidences of late suffering. He says he is one hundred pounds lighter than he was fifteen years ago. He suffers from severe and constant pain in the right side of the face, and his misery is still further increased by frequent paroxysms of pain, which causes the muscles of the right side of the face to contract convulsively. The pain has never extended above the supra-orbital ridge, but it extends backward from the exit of the supra-orbital nerve to a point above the right ear. The pain has never involved the nerve in its distribution to the hairy scalp. The second division of the right trigeminal nerve is the seat of constant pain; the first, in a portion of its distribution, is frequently painful, and the third division is occasionally so. On carefully testing for the various forms of sensation no changes from normal were found except in the right side of the face, where, especially in the region of distribution of the first and second divisions of the great sensory nerve, there seemed to be a condition of hyperalgesia. The contact of my finger, the æsthesiometer, and sometimes even of a feather, would cause him the most violent paroxysms of suffering. It was impossible, on account of his sufferings, to test tactile and temperature senses on the right side of the face.

Taste, right, imperfect; left, normal; smell was very much more pronounced on the left than on the right side. Hearing for watch was poor on both sides, but the tuning-fork was better heard with left ear. Eyes presented no marked changes further than slight paleness of the nerves, which was more marked in right eye. He said that vision had lessened considerably during the last two or three years. In the right eye it was 20/XL; left, 20/XXX. The fields were normal.

On examining the motor system, nothing was found which could not be accounted for by the swollen and painful joints. The left shoulder, both knees, both ankles, and several toe joints were the seat of pain, and were swollen and limited in motion.

He was, at my request, admitted into the Arapahoe County Hospital. He was kept in bed, and given large doses of sodium salicylate. This soon relieved his joint pain, but it had no appreciable effect on his trigeminal nerve pain. Large doses of quinine were tried, but this seemed to give no relief. No agent employed appeared to have the slightest permanent effect in lessening his suffering.

After a careful study of his case, notwithstanding his reduced state of health, I not only advised but urged him to submit to the necessary operation for the removal of the Gasserian ganglion, or the excision of the three divisions of the nerve at this ganglion, as the case might be. He replied that he had placed himself in my care, and would gladly do anything that promised him entire relief from his intolerable suffering. The attending surgeon was notified, and set the day for the operation. After the man was anesthetized the surgeons decided to first try the superficial operation, and then, if no relief was obtained, to excise the Gasserian ganglion. I did my utmost to dissuade them from this procedure, urging that the man had submitted to the operation with the expectation that only one operation would be necessary, that there was no good reason to expect the slightest relief from excision of the peripheral ends of the three grand divisions of the fifth cranial nerve, and that when he should find no relief from the minor operation, he would become discouraged, and refuse to submit to the major. I was especially anxious that the radical operation should be performed, because the man had come to Denver from a neighboring State, and desired me to decide the degree of the operation necessary for his relief. The surgeons did not seem to be willing to undertake so great an operation at that time, and I submitted, hoping, without much reason for hope, that some good would be accomplished by the superficial operation.

The operation consisted in dividing the distal ends of the three divisions of the trigeminal nerve at the mental, supra-, and infra-orbital foramina. Before the patient regained complete consciousness from the anæsthetic he began to groan with pain, and after the influence of the anæsthetic had worn off he said the pain was greater than it was before operation. He remained in the hospital just long enough for the wounds to heal. He suffered constantly, and was disgusted with our failure to relieve him, and left, refusing to submit to another operation.

I never saw the patient after he left the hospital. Dr. A. J. Baker, who performed the major operation on him, about one year after he had submitted to the minor, will give an account of his condition at the time of the second operation.

#### OPERATION AND REMARKS BY DR. BAKER.

Mr. G., reported to me for treatment in July, 1892, when I turned him over to Dr. Eskridge, who gives the above report.

He also reported to me immediately after leaving the hospital, and was soon compelled to return to his home, as his stay in the hospital had practically spent all the money he could raise. He moved to Denver in May of the present year, where I found him on my return to the city, about the middle of June.

His condition was very much worse than when I last saw him, nearly a year before. He was so nervous that he would break down and cry

over the most trivial affairs. His assimilation was very poor, and gradually growing worse. He had not been free from his neuralgia at any time during the last year, which had greatly increased in severity. This pain came on every few minutes, night and day, and was almost as severe as the severest pain of labor, convulsing, apparently, every muscle in the body. He was using much larger doses of morphine, and also drinking nearly half a pint of whiskey daily. His family had taken a loaded revolver from him three different times during the last year while he was suffering from these pains, when he was trying to discharge the contents of the revolver into his brain. I appointed June 26th for the operation, and desired very much to postpone it on account of a lack of time, when I learned that he had decided to cut his throat that night if I did not operate.

As circumstances compelled me to operate, if at all, in his house, I ordered all of the woodwork scrubbed and the whole house thoroughly disinfected. I endeavored to make everything as perfectly aseptic as possible, and feel that this part of my work was quite successful.

I operated in the afternoon of June 26th. I followed Rose's plan quite closely, making one circular incision through the skin from above the right zygomatic arch, near the eye, back near the ear, downward in front of the ear, and then followed the posterior edge of lower maxilla to near where the facial artery crosses it. This flap was dissected forward and stitched to skin near the mouth. The zygoma was then exposed and drilled, two holes being near the front and two near the back part of the arch. I then sawed the arch between each of these pairs of holes, and turned the arch with the masseter muscle downward. I then removed some adipose tissue, which exposed the coronoid process of the lower maxilla, which was divided with bone-forceps, and the temporal muscle turned upward. I then made a diligent search for the internal maxillary artery, but did not find it. So I proceeded to remove the external pterygoid muscle from the great wing of the sphenoid bone to search for the foramen ovale. I secured the inferior dental and gustatory nerves near the lower border of the external pterygoid muscle and internal to ramus of the jaw, and followed them up to the foramen ovale.

The muscle being removed from the wing of the sphenoid back to the foramen ovale, I placed the trephine anterior and external to the foramen, as indicated by Drs. Andrews and Rose, and took out a half-inch button. I was able to depress the trephine by means of an extension I will describe later, so that the plate was cut through almost simultaneously. I then cut away the plate back to the foramen ovale with a pair of rongeur forceps.

There was no pulsation of the brain discernible, nor the slightest protrusion through the opening just made. The dura was very hard, giving almost the impression of bone—certainly an inflammatory thickening. The conditions there made it impossible to reach the ganglion behind, as recommended by Rose, so I was compelled to work in front. I secured the second branch of the fifth nerve, clipped it off with a pair of curved scissors, and entered the capsule of the Gasserian ganglion between the first and second branches. I then scooped out the contents of the capsule, and clipped off its lower part, leaving its upper part intact.

I then removed the coronoid process from the temporal muscle previously severed, checked the hemorrhage as well as I could, and thoroughly cleansed and closed the wound. I took the time to wire the zygoma in

place, the drilling and wiring taking less than five minutes. I thought this time not wasted, as necrosis has often followed operations where the zygoma has not been wired in place.

The oozing was very excessive, hindering us greatly in the operation; yet we had no trouble from arterial hemorrhage. I closed the fascia over the zygoma with catgut, and then closed the flap of skin with a continuous catgut suture, the wound coapting exactly. With the exception of the great difficulty of anesthetizing the patient, and inability to keep him perfectly under its influence, which hindered us considerably, we met no greater difficulties than we anticipated.

The patient slept nicely all night, and was perfectly relieved of his neuralgia. He had only about a degree of temperature elevation the next morning, but he had not taken much nourishment. I ordered milk given him every three hours during the day. On my return in the evening I found that he had only taken about a glass of milk, and was very restless. His temperature then was about 101°. As I learned that no arrangements had been made for a competent nurse that night, I decided to stay with him myself. I was only able to control the restlessness for a brief period at a time. His pulse gradually weakened, and he died of shock thirty-eight hours after the operation.

I could not secure a post-mortem, which was certainly very desirable. I opened the wound, however, sufficiently to find that there was not a particle of pus present, and that everything about the wound seemed to be in a perfect condition. The wound was perfectly united all around, and there is no doubt, had the patient survived the shock, that we would have had a perfect result.

It was probably a mistake to attempt such an operation at his own house, even under the circumstances; partly because it was not possible to make his house as perfectly aseptic as a hospital, but principally because he could not be properly controlled at home.

To my knowledge, this operation has only been performed twelve times. All cases were perfectly relieved of their neuralgia, and only two cases proved fatal. Dr. Rose, of England, has performed the operation six times, his last case proving fatal. The same number of operations have been performed in America; twice in Chicago, once in Kansas City, and three times in Denver, my case only proving fatal.

## THE COMPARATIVE VITALITY OF MEN AND WOMEN.

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WE cannot always agree with Sidney Smith's dictum, "There is nothing so unreliable as figures, unless it is facts." Much less substantial oftentimes are the impressions which are held by the laity, and occasionally even by the profession. The writer had some nebulous ideas dispelled recently by an investigation of the mortality of men and women. He submits herewith the conclusions.