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Illustrations

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HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

A SERIES OF FIVE CASES OF SCALP-WOUND.

By G. F. COOPER, Esq., Surgical Registrar.

CASE I. T. B., aged 21, was admitted on September 20th, under the care of Mr. Hawkins. Just before admission, he had fallen from a loft on to his head, a distance of about twenty feet; but was not stunned. On admission, there was a large scalp wound, reaching from the external angular process of the left frontal bone to the middle of the parietal suture, and thence to the left side of the occiput, so making a right angle; and this flap was torn off the pericranium downwards as far as the ear. There was a small piece of bone exposed at the left side of the frontal bone. The wound was a pretty clean cut, and was directly strapped up. On the next day he was rather drowsy; but had no great pain in the head. The pupils were regular, and acted well. The wound had almost entirely healed, but there was some oedematous swelling at its lower portion where the bone was exposed. The wound was torn open for about an inch in length to give free exit to any confined matter, and a poultice was applied.

October 1st. The wound, at its lower part, was discharging freely. There was a little erysipelas about the left side of his face. He was ordered a purgative.

October 5th. The erysipelas had gradually subsided, and the wound looked very healthy. The poultice was omitted, and simple water-dressing applied.

On the next day the wound burst out bleeding, which somewhat hindered the small remaining portion that was then unsound from healing; but from that date no untoward symptoms followed. The man was ordered tonics and good diet; and on the 28th he left the Hospital, quite well.

CASE II. G. C., aged 29, was admitted on March 17th, under the care of Mr. Hawkins. Just before admission he fell off the top of a cart containing gravel, the wheel of which passed over the right side of his head and shoulder. On admission, the upper half of the right ear was torn away from its attachments, and just in front of it there was a wound about the size of a half-crown, exposing the temporal artery, which could be seen beating; but not denuding the bone in any place. He had lost the sense of hearing on the right side since the accident. The wounds were brought into apposition with silver sutures, and water-dressing was applied. There was a fracture of the right clavicle, as well as of three or four ribs. He stated that he had been a very intemperate man. There were no bad symptoms, however, and the wound looked very well, till the 22nd, when he complained of being rather feverish. His tongue was furred. He had no appetite, and his skin was hot, but perspiring. There was a little redness around the wound. He was ordered salines, with Dover's powder.

March 24th. Last night he was rather delirious, and to-day his pulse was full, 120; the tongue was furred and tremulous. There was no pain in the head, but a little puffiness around the wound; otherwise it looked well. He was ordered salines, with twenty minims of tincture of opium every four hours.

March 25th. Last night he was very riotous and delirious; but, to-day, was rational when spoken to. There were some twitchings of the left side of his face; his skin was hot; the tongue was brown and dry. He was ordered four ounces of gin daily.

March 28th. He was not so delirious as he had been; his pulse was 120. The skin was still hot, and the tongue dry and brown. He sweated a little, but had had no rigors. There was more puffiness about the scalp, so a few incisions were made to set free any confined matter there might be. He complained of pain in his left groin and hand, and whenever he was moved he experienced great pain, which ran up the left side of his thigh and body, causing them to become at the same time contracted and rigid.

On the next day an abscess was opened in the left thumb, and there was more fullness of his left hip joint. He sweated profusely. The gin was increased to six ounces, and more porter was given.

March 30th. His right wrist-joint was opened, and much thick pus set free.

March 31st. He had become more delirious. He never had had any pain in his head, and when spoken to he answered rationally, and never had a rigor. The wound in his head was dry and sloughy. Fresh abscesses showed themselves in different parts of his body, and early on April 3rd he sank.

POST MORTEM APPEARANCES. The right ear was torn away from the head, and there was a large sloughy wound there, not exposing the bones, of about the size of a crown-piece, in the centre of which the meatus auditorius was seen. There was no injury to the tympanum, but there was a minute opening in the membrana tympani, which perhaps had existed before the accident. The cranial bones were uninjured. A small patch of the dura mater, corresponding to the scalp-wound, of about the size of a sixpenny piece, was sloughy; and the cortical tissue of the brain was softened to about the same extent, and to a slight depth. The membranes were here united to each other. The rest of the brain was healthy. The right clavicle was fractured; the fragments being bathed in a large quantity of offensive pus. The third, sixth, and eighth ribs were also fractured, and their fragments were likewise bathed in offensive pus. The lungs and abdominal viscera were healthy. Both hip-joints and the right wrist-joint were also filled with pus, of the same offensive character.

CASE III. J. H. aged 64, was admitted on July 21st, under the care of Mr. Tatum, for a scalp-wound about four or five inches in length, on the left side of the vertex, from which there was much hæmorrhage at the time. No bone was exposed, and the wound was a pretty clean cut. It was caused by his being thrown out of a cart on to the kerb-stone. He was not stunned by the fall. He had always been very intemperate.

July 23rd. He was delirious and noisy; evidently suffering from delirium tremens. He was ordered half a drachm of tincture of opium every four hours, with good diet and porter. The wound on the head had almost entirely healed by the first intention.

July 25th. He was rather quieter, but still very stupid. The scalp about the wound was puffy, and two days afterwards there was diffuse cellular inflammation beneath the occipito-frontalis, for which the house-surgeon made free incisions, which somewhat relieved him.

August 2nd. He had now become more delirious, constantly attempting to get out of bed, and was very slightly sensible. The whole of the scalp from the occiput to the middle of the forehead was undermined by a thin, unhealthy matter, which was discharged in large quantities from the wound. A small portion of the right parietal bone was now exposed. He had no sleep; his appetite was very poor; tongue dry and brown; pulse 120, and very weak. On the next day, he was ordered eight ounces of brandy daily, and as he had some diarrhoea, chalk and opium mixture.

August 5th. A small slough had now formed on the lower part of his back. There was more suppuration about the wound, and even sloughing of the integuments themselves had commenced. This sloughing gradually increased, and the man became daily more and more exhausted. No fresh symptoms showed themselves, and on August 12th he sank.

POST MORTEM APPEARANCES. A large portion of the scalp had

sloughed away, leaving the bones exposed. The visceral surface of the dura mater was smeared with lymph; the external surface was healthy. There was a considerable effusion of lymph and sero-purulent fluid in the sub-arachnoid space. The brain was in all respects healthy. All the other viscera were healthy.

CASE IV. J. C., aged 40, was admitted on May 14th, under the care of Mr. Hawkins. At twelve o'clock of the night previous to his admission, he was standing at the bar of a public house, drinking some gin and water, he having had something to drink before; but his friends stated he was sober, when he suddenly fell backwards, and struck the back part of his head against a wall. When admitted, at 11 A.M., he was perfectly insensible, and his breathing stertorous, he having been in this state, his friends said, ever since the accident. There was an incised wound, about one inch in length, over the middle of the right parietal bone, but it did not lead down to bone, neither could any depression or fracture be detected. He had passed no urine since the accident, but his bladder did not appear at all distended. Both pupils were regular, and rather contracted, but they were constantly changing; the conjunctiva was insensible; the skin cold; pulse 96, and scarcely to be felt. There was whiffing from one of the corners of his mouth, but no paralysis. Five grains of calomel was directly put upon his tongue, and his head was shaven. At 3.30 P.M. he was becoming sensible, and answered when spoken to.

On the following day he was quite sensible. The pulse was 95, quiet. He had no pain in his head. The wound was healed.

May 17th. There was a little puffiness and pain around the wound, but they had disappeared by the next day.

May 19th. At 4 P.M., and 12 (midnight) yesterday, he had rigors, lasting each time for half an hour, and followed by profuse sweatings. To-day he complained of great general headache; the pulse was 80, soft; skin perspiring; tongue white, and rather furred. Three grains of calomel and five of Dover's powder were given at bed-time, and a senna draught the following morning. After the bowels had well acted, all these symptoms left him, and he had no return of them; on the 25th, he left the Hospital, quite well.

CASE V. Johanna B., aged 59, was admitted on February 5th, under the care of Mr. Tatum. This woman was knocked down by a butcher's cart, the wheel of which passed over the left side of her head. She was immediately brought in for a large scalp-wound on the left side of her head, extending from the external angular process of the frontal bone to about the middle of the temporal ridge; the bone being exposed for the space of about a crown-piece, and the integuments being separated from the pericranium almost as high as the vertex, and below down to the ear. The parts, which were covered with mud, were cleaned, put into proper position, and strapped. The right ear was much lacerated at its lower part, a small piece of it having been torn completely off; and there was also a lacerated wound in front of it, over the right temple. The lower jaw was fractured in two places, corresponding in position to the bicuspid teeth, the intervening portion being quite loose. There was a considerable bruise just above the left mamma, but no fractured rib could be detected. There was no concussion of the brain. Her pulse was very slow and weak. She was ordered carbonate of ammonia with chloric ether, in camphor mixture, every four hours; with five ounces of port wine, and three of brandy. On the 7th, there was much erysipelas and swelling of both eyelids and left side of the face. The wound had become sloughy, and there was much puffiness around it, especially behind. She was very low, and had no appetite; but there was no sickness, nor any pain in the head.

February 9th. The erysipelas was still considerable. She had much bronchitis, having had it to a trifling extent for three weeks previous to her admission. There was great difficulty in bringing up the expectoration; but her breathing was relieved by the sitting posture, and after the application of a mustard poultice.

From this time her breathing became more difficult, and at times she was almost choked from the bronchitic expectoration that she had not the power of bringing up. The wound of the head became excessively sloughy and offensive, the matter burrowing much beneath the integuments, especially behind. She was supported as much as possible by beef-tea, brandy, etc.; but she gradually sank, and died on the 11th.

POST MORTEM APPEARANCES. There was a large sloughy

wound on the left side of the head, in which a great part of that side of the frontal bone was exposed. Another wound also existed on the right side of the head, just in front of the ear, which was greatly lacerated. There was a quantity of very offensive pus in the cellular tissue, beneath the tendon of the occipito-frontalis. On removing the skull-cap, it was found that a small piece of the inner table had been slightly separated from the rest of the skull, at the anterior inferior angle of the left parietal bone, by a fissure running obliquely through the diploë. The effused blood on the edges of this fissure clearly showed that it had been produced during life. The fragment of the inner table so separated was about the size of a shilling. When found, it was slightly displaced inwards; but this might have been a result of the sawing, as the section ran through it. The brain seemed quite healthy. The lower jaw was found fractured in two places. The lungs were healthy, except considerable injection of the lining membrane of the bronchi.

REMARKS. These five cases will point out most of the pathology of, and complications that are met with in, scalp-wounds. All of them show the two most common and almost invariable seats for the wound to take place; namely, firstly (and this is by far the more general of the two), in the loose cellular tissue, between the occipito-frontalis and the pericranium; and secondly, between the latter and the bones, where the adhesions, too, are but slight, except at the situation of the sutures.

The first case illustrates what extensive lacerations may occur in the scalp, and yet, on account of the very free supply of blood to that part, union may readily take place.

The second case appears to be one of those where contusion of the bone accompanies a simple scalp-wound. In these contusions, it is in the diploë that the mischief occurs; inflammation commences in it, which soon passes on to suppuration; and, on account of the very free communication its vessels have with those of the meninges of the brain, the latter become secondarily affected. It is also due to this suppuration taking place within the diploë, where, too, there are such large veins, that absorption of pus into the circulation of the blood readily takes place, and secondary deposits follow.

The third shows, when suppuration and sloughing beneath the occipito-frontalis does take place, how much more readily the pericranium is liable to become affected than the scalp itself; and this is easily to be explained, on account of the great difference there is between these two parts in their supply of blood. This case, too, is interesting from the great rarity of such extensive sloughing of the scalp.

The fourth is given to show how a surgeon may be deceived with symptoms of disease, especially in those affecting the head.

The fifth is interesting on account of the peculiar fissure on the internal plate of the skull, and no symptom whatever resulting from it.

WESTMINSTER HOSPITAL.

WOUND OF THE FEMORAL ARTERY AND VEIN.

By C. HOLTHOUSE, Esq.

IN the BRITISH MEDICAL JOURNAL of May 7th, of the present year, there is reported a case of the above accident, which was under my care at the Westminster Hospital, and from which the patient was discharged cured on February 25th last. It may be interesting to know the condition of this man's limb six months after his discharge; he having been at work as a carpenter during nearly the whole of this time.

On August 12th, being out of employment, in consequence of the strike, he called on me, and the following note was made: "The sore on the heel has not yet cicatrised; there is some oedema of the foot and ankle; the internal and external saphena veins and their branches are larger and fuller than those of the opposite limb; the pulsation in the posterior tibial artery is less distinctly felt than in the other leg, but this may be partly accounted for by the oedema; there is no difference in the temperature of the limbs, though there was at first (the weather is very warm); the patient still experiences some numbness of the foot and calf of the leg, and cannot walk far or quickly, without bringing on an aching pain in the latter."

In the "remarks" which were appended to this case at the time of publication, a doubt was expressed as to its being the femoral vein which was wounded; but that it really was so, and that this vessel is now obliterated at the seat of the