

'Neurosurgery' in the Edwin Smith Surgical Papyrus

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The Edwin Smith surgical papyrus. Chicago: Univ. Chicago Press, 1930, 2 Vols (*see 1: pp.xvi, 6, 430-435, 437-439, 446-448, 451-454, 466; 2: pl. XVII, XVIII*). Printed with the kind permission of Chicago press.

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The Edwin Smith Surgical Papyrus dating from the seventeenth century B.C., is one of the oldest of all known medical papyri. The Egyptologist who brought this manuscript to light, Edwin Smith was born in Connecticut in 1822. In 1930 James H. Breasted translated the treatise and established its importance.

Of the 48 cases described in the Edwin Smith Papyrus, 27 concern head trauma and six deal with spinal trauma. Of the 27 head injuries, four are deep scalp wounds exposing the skull, and 11 are skull fractures. The following four cases are reproduced in part, from Breasted classic translation.

Case Four

Title: Instructions concerning a gaping wound in his head, penetrating to the bone, (and) splitting his skull.

Examination: If thou examinest a man having a gaping wound in his head, penetrating to the bone, (and) splitting his skull, thou shouldst palpate his wound. Shouldst thou find something disturbing therein under thy fingers, (and) he shudders exceedingly, while the swelling which is over it protrudes, he discharges blood from both his nostrils (and) from both his ears, he suffers with stiffness in his neck, so that he is unable to look at his two shoulders and his breast...

Diagnosis: Thou shouldst say regarding him: "One having a gaping wound in his head, penetrating to the bone, (and) splitting his skull; while he discharges blood from both his nostrils (and) from both his ears, (and) he suffers with stiffness in his neck. An ailment with which I will contend." **Treatment:** Now when thou findest that the skull of that man is split, thou shouldst not bind him, (but) moor (him) at his mooring stakes until the period of his injury passes by. His treatment is sitting. Make for him two supports of brick, until thou knowest he has reached a decisive point. Thou shouldst apply grease to his head, (and) soften his neck therewith and both his shoulders. Thou shouldst do likewise for every man whom thou findest having a split skull...

Gloss: As for "(Until) thou knowest he has reached a decisive point," it means (until thou knowest whether he will die or he will live; for he is (a case of) "an ailment with which I will contend."

Case Five

Title: Instructions concerning a gaping wound in his head, smashing his skull. **Examination:** If thou examinest a man having a gaping wound in his head, penetrating to the bone, (and) smashing his skull; thou shouldst palpate his wound. Shouldst thou find that smash which is in his skull deep (and) sunken under thy fingers, while the swelling which is over it protrudes, he discharges blood from both his nostrils (and) both his ears, (and) he suffers with stiffness in his neck, so that he is unable to look at his two shoulders and his breast...

Diagnosis: Thou shouldst say regarding him: "One having a gaping wound in his head, penetrating to the bone, (and) smashing his skull, while he suffers with stiffness in his neck. An ailment not to be treated."

Treatment: Thou shalt not bind him (but) moor (him) at his mooring stakes, until the period of his injury passes by...

Case Eight

Title: Instructions concerning a smash in his skull under the skin of his head. **Examination:** If thou examinest a man having a smash of his skull, under the skin of his head, while there is nothing at all upon it, thou shouldst palpate his wound. Shouldst thou find that there is a swelling protruding on the out side of that smash which is in his skull, while his eye is askew because of it, on the side of him having that injury which is in his skull; (and) he walks shuffling with his sole, on the side of him having that injury which is in his skull...

Diagnosis: Thou shouldst account him one whom something entering from outside has smitten, as one who does not release the head of his shoul fork, and one who does not fall with his nails in the middle of his palm; while he discharges blood from both his nostrils (and) from both his ears, (and) he suffers with stiffness in his neck. An ailment not to be treated. Treatment: His treatment is sitting, until he [gains color], (and) until thou knowest he has reached the decisive point....

Gloss: As for: "He walks shuffling with his sole," he (the surgeon) is speaking about his walking with his sole dragging, so that it is not easy for him to walk, when it (the sole) is feeble and turned over, while the tips of his toes are contracted to the ball of his sole, and they (the toes) walk fumbling the ground. He (the surgeon) says: "He shuffles," concerning it...

Case Twenty

Title: Instructions concerning a wound in his temple, penetrating to the bone, (and) perforating his temporal bone.

Examination: If thou examinest a man having a wound in his temple, penetrating to the bone, (and) perforating his temporal bone, while his two eyes are blood shot, he discharges blood from both his nostrils, and a little drops; if thou putteth thy fingers on the mouth of that wound (and) he shudder exceedingly; if thou ask of him concerning his malady and he speak not to thee; while copious tears fall from both his eyes, so that he thrusts his hand often to his face that he may wipe both his eyes with the back of his hand as a child does, and knows not that he does so...

Diagnosis: Thou shouldst say concerning him: "One having a wound in his temple, penetrating to the bone, (and) perforating his temporal bone; while he discharges blood from both his nostrils, he suffers with stiffness in his neck, (and) he is speechless. An ailment not to be treated."

Treatment: Now when thou findest that man speechless, his [relief] shall be sitting; soften his head with grease, (and) pour [milk] into both his ears.