TWO CASES OF TRAUMATIC SEPARATION OF THE UPPER MANDIBLE.

BY WILLIAM BLIGH, M.D., B.S. LOND.

CASE 1.—On Nov. 30th, 1896, a friend and patient of mine, aged 41 years, on returning from a day's shooting was seated in a wagonette driven by a coachman. The horse bolted down a steep hill into a village and threw the coachman off the box seat. My friend, fearing for the safety of others in the village street, pluckily made an attempt by climbing over the box seat on to the horse to get command of the reins and stop the animal. He, however, fell and crashed on to the ground on his face. He was not concussed, but bled a good deal from the nose and mouth. I saw him about an hour after and found his entire upper jaw freely moveable both laterally and from before backwards, the entire mandible being apparently hinged on to the articulations of the nasal processes of the two superior maxillæ with the frontal bone. The hard palate, the nasal bones, and the nose all moved in one piece with the two superior maxillæ. There was no escape of cerebro-spinal fluid, no sign of brain injury, no hæmorrhage into either orbit, or interference with the lacrymal ducts, and very little pain or extravasation into the soft parts; in fact, my friend was so little hurt that he exhibited his new accomplishment of wagging the whole front of his face to and fro with no little pride and humour.

Treatment consisted in keeping the lower jaw firmly pressed against the upper with a plaster bandage, and gentle syringing of the nasal cavities and washing out of the mouth with an antiseptic wash. The range of movement in the mandible steadily became less and less, and within from three to four weeks the jaw was firmly fixed once more. Some not very severe neuralgia of the right infra-orbital nerve, probably produced by pressure of callus, came into evidence at the end of the second week, and lasted for about a fortnight.

CASE 2.—A woman, aged 33 years, was driving a spirited pony in a governess cart on Jan. 4th, 1909, when the animal bolted and dashed into another cart. The woman was flung out violently upon her face. I saw her within a few minutes of the occurrence and found her concussed but not deeply unconscious, in fact in a typical state of cerebral irritability. There was fairly free hæmorrhage from the nose and mouth, the left upper central incisor was found loose inside the cheek and the other left upper incisor had been knocked out but was missing; several teeth on the left side of the lower jaw were much loosened, the left lower central incisor was hanging quite loose and the right lower central incisor was turned almost completely round in its socket. The lower jaw, however, was not broken. As in Case 1, the upper mandible was quite loose in one piece and could be moved freely laterally and from before backwards hinging upon the articulations of the nasal processes of the superior maxillæ with the frontal bone, in which position crepitus could readily be detected. The soft parts of the face and the eyelids were much swollen from blood extravasation. The nose and the palate moved with the mandible. On the next day the whole face was enormously swollen, neither eye could be opened and the general aspect was that of a more or less shapeless pudding. There was no escape of cerebro-spinal fluid and no paralysis of nerves, but oozing of blood from the anterior and posterior nares continued for several days. As soon as the eyelids could be opened much subconjunctival ecchymosis could be seen but it was not wedge-shaped and evidently came from the eyelids and not from a fracture involving the anterior fossa of the skull.

The condition of moderate concussion continued for several days but no symptoms of anxiety supervened, the swelling of the face gradually lessened and the mandible steadily became more fixed, so that three weeks after the accident the jaw was nearly immovable. On account of the state of the mouth and teeth no attempt was made to fix the fracture, the jaw was gently pressed into good position and antiseptic washes were used as in the first case.

The exact line taken by these fractures posteriorly is impossible to determine without dissection, and I do not think that a radiograph would help greatly. The malar arches in each case were intact, the separation taking place at the junctions of the malar processes of the superior maxillæ with

the maxillary borders of the malar bones. In both cases the separation above took place at the articulations of the nasal processes of the superior maxillæ with the frontal bones so that the upper mandible carrying the nasal bones with it hinged upon the root of the nose just below the glabella. With these (the four main stays of the upper mandible) gone very little additional force would complete the bony loosening of the jaw, as is seen in removal of one upper jaw, where, when one superior maxilla is sawn apart from its fellow, it is only necessary to saw through the nasal process and the junction with the malar to remove the bone by rocking with lion forceps.

Judging from the second case, no treatment aimed at steadying the fracture seems necessary; nature is so kind to wounds about the face, owing to the plentiful blood supply, that the mobility of the mandible rapidly diminishes and union becomes firm without any aid from the surgeon.

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A CASE OF PULMONARY TUBERCULOSIS TERMINATING WITH ACUTE STREPTOCOCCAL MENINGITIS.

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A GIRL, aged 13 years, was admitted to the Victoria Hospital for Children, Chelsea, on Dec. 12th, 1907, with the following history. Six months previously she had had pneumonia, her mother not being certain whether it was "double" or confined to the left side. Since that time she had not been out of bed for longer than periods of a week or so at a time. Whenever she did get up her temperature was found to rise to 101° or 102° F. She frequently coughed up "blood and matter." She had coughed up similar material on the morning that she was brought to the hospital, and also 11 days previously. Before coughing up the sputum she would have attacks of pain in the left side sometimes accompanied by shivering. There was profuse perspiration at night. Since the attack of pneumonia the mother had noticed the girl to have a swelling in the neck and also to be losing her hair. She had menstruated regularly since the previous June, the last "period" being three weeks before admission. The only thing of note in the patient's previous history was that she had had, when seven years of age, an "open" tenotomy of the right sternomastoid performed for torticollis. The parents were both healthy and there was no history of tuberculosis in the family.

Physical examination.—The patient was a tall, thin girl, somewhat anæmic. The sexual features were well developed, and her general appearance suggested that she was somewhat older than the age given (13 years). Moderate enlargement of the thyroid gland was noted. The pulse was 116, small in volume and regular. Tremors and exophthalmos were absent. The physical signs in the chest, on admission, were flattening of the percussion note over the apex of the right lung anteriorly and also over the posterior surface of almost the whole of the left lung. Over the right upper lobe the tactile vocal fremitus was distinctly increased. On auscultation, air entry into the upper lobe of the right lung was found to be diminished. Expiration was prolonged. A few crepitations could be distinguished. Beyond the flattened percussion note and a poor air entry nothing further was made out in the left lung. Examination of other systems was negative.

Subsequent course.—On Dec. 14th (two days after admission) the patient coughed up some sputum containing nummules and streaked with bright blood. At 6 P.M. the temperature was 99.4° and she complained of pain in the left side and in the region of the heart. On the 15th a smear preparation of the sputum was stained by the Ziehl-Neelsen method and counterstained with methylene blue. Tubercle bacilli were found, together with definitely capsulated diplococci morphologically resembling pneumococci. Some scattered micrococci were also seen. Unfortunately, no cultures were made to decide definitely upon the nature of the cocci. On the 18th the catamenia commenced. The general condition of the patient had improved. The enlargement of the thyroid had subsided somewhat.