

5. The diet was strictly fluid, and in many cases of unconsciousness, food was given *per rectum* for several days—peptonized beef juice and egg, with a little brandy, yielding very good results, given in this way every four hours. It is, I think, highly important to carefully nourish these cases of fracture by suitable diet.

But the question may naturally arise, can one always be sure that one has a fracture of the base to deal with. I cannot answer this better than by quoting a recent utterance of a London surgeon on this subject: "The signs of a fractured base are exceedingly equivocal, and it is often only by a consideration of the whole picture that a certain diagnosis can be made." (Rose & Corless Surgery, 1898, p. 464).

If one has, following severe injury to the head, (1) evidences of severe brain injury; (2) bleeding from the cranial orifices which communicate with one or more fossæ of the skull; and (3) if the presence of cerebro-spinal fluid can be demonstrated in the discharge from any of these orifices, it seems to be fair to conclude that one is dealing with a fractured base. More especially is this true if one finds, at the same time, a fracture of the parietal or temporal bones, as so often happens. These fractures of the vault, I am convinced, often extend to the base, but being linear and not compound, they require no treatment and so escape notice.

What are the dangerous complications of fractures of the base of the skull?

1. *Hæmorrhage*.—The fracture may easily tear the dura mater and open some of the large venous sinuses, with fatal effect. This accounts for the great fatality following fractures of the posterior fossa of the skull (the drainage basin), as compared with either the middle or anterior fossa. Hæmorrhage, too, may also result (as in No. 1. of the above series) from the fracture involving some of the arteries entering the base of the skull. The treatment must be directed to the control of this by any and every means possible.

2. *Sepsis*.—The fracture may become compound, opening into some of the cranial canals which communicate with the outer air; for example, the external auditory meatus, the Eustachian tube, the nose and nasopharynx. Most fractures involving the middle and anterior fossæ of the skull communicate with some one or other of these cavities, and so are just as truly compound as the end of the tibia sticking through the skin, and here it is that modern antiseptic surgery should, and I claim does, give us good results when faithfully and intelligently applied. If the cracked skull is kept aseptic by proper treatment of the road leading to the site of fracture, it will heal as kindly and with as little constitutional disturbance as any other bone treated in the same way. It is not enough in these modern days, when one sees a patient who has received a severe