

diagnosis of cerebral abscess; secondly, on the latency of cerebral abscess (this will lead us to consider the probable period at which the cerebral abscess in this case was formed). In the third place, we must dwell for a moment on the remarkable temperature we encountered in the course of this case, simulating as it did an anomalous kind of intermittent fever. Fourthly, we may attempt to answer the question, Was surgical interference called for at any period in its course? Fifthly: Had the affection of the elbow-joint anything to do with the cerebral mischief; and, finally, does the case throw any light on the question of cerebral localisation?

Of the causes of abscess of the brain, one of the commonest is inflammation of the middle ear, leading to caries of the petrous portion of the temporal bone; and in this disease the suppurative inflammation often extends, as it appears to have done in the case before us, by exciting phlebitis of one or more of the cerebral sinuses and their tributary veins, which become occluded by purulent thrombi. Injuries of the skull attended with fracture also not infrequently lead to the formation of cerebral abscess, as may readily be understood; but abscess of the brain arising from a blow on the head without fracture is a comparatively rare occurrence. It is, however, well known that this may occur, as Sir William Gull long ago pointed out. "In such cases," he says, "the injury excites inflammation and suppuration of the diploë of the bone, and the suppuration extends and involves the brain." But it was not exactly so that the abscess of the brain arose in this case, for examination of the bone reveals no evidence of suppuration in its substance. It would seem that the primary seat of suppuration was that part of the dura mater lying immediately under the injured and inflamed bone. Here a small, distinct, circumscribed, and encysted collection of pus was formed; the suppurative inflammation extended to the portion of the longitudinal sinus beneath it, which became plugged by a thrombus; and thence it further extended into a large collateral tributary vein, and excited suppurative foci in the two portions of the cerebral substance which I have described before.

The symptoms of cerebral abscess are by no

means characteristic; they must necessarily be dependent on the situation of the abscess. They may, as we shall presently see, be entirely absent. Pain in the head, continuous and severe, is generally regarded as one of the most constant, and sometimes is the only, symptom present for months. In this case, pain was by no means prominent until the appearance of other cerebral symptoms. Rapid emaciation has also been pointed to as a striking feature in many cases, and we remarked the great emaciation in this case even when the patient protested that he felt quite well; but, since it was coincident with the occurrence of sharp febrile paroxysms, they seemed sufficient to account for it.

The mental symptoms in this case were precisely those which have been described by Sir William Gull. "Now and then," he says, "the only (mental) symptoms were a heavy expression, a disinclination to speak, and indifference to surrounding objects."

I have already said that the symptoms of cerebral abscess, especially those connected with sensation and motion, must necessarily depend on the locality it occupies; and from this point of view it has been pointed out by Huguenin, in the twelfth volume of Ziemssen's *Cyclopaedia*, that, in the case of abscess of the temporal lobe, where our patient's largest collection was situated, "the difficulty of diagnosis is increased by the circumstance that no bands of fibres, which are direct conductors of sensibility or motion," pass through this lobe; and therefore an abscess in that lobe "may attain a considerable size, and may cause general symptoms of compression before any distinct symptom of local disease arouses the suspicion of a localised affection of the brain; and for this reason the acute abscesses belonging to this category, in the great majority of cases, have not been positively diagnosed."

But the diagnosis of cerebral abscess is proverbially difficult, and chiefly on account of the latency of its symptoms, of which I must now say a few words. Sir William Gull says that "abscess" following injury to the head "may remain latent for months or even longer"; and, again, "an abscess may lie latent in the brain for many months, and then acute symp-