marked atrophy, exaggerated reflexes and normal electrical reaction.

The pathological conditions in acute cases have not been observed yet; in chronic cases the cerebrum presents marked localized atrophy with cicatricial contractions. If the disease be near the surface, as it usually is, there is depression with thickening of the pia mater. The pyramidal tracts and lateral columns of the cord present secondary degeneration. Strümpell believes the diseased process to be limited to the motor area of the cortex cerebri.

If these remarks serve to draw the attention of the profession to acute encephalitis as a possible cause of hemiplegia in children it will have fulfilled its mission.

ACUTE PERIOSTITIS.

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ACUTE periostitis, as a formidable and even dangerous disease, should, I think, engage the serious attention of every surgeon. Its early recognition and subsequent decided and energetic treatment are highly momentous to the patient. Through unskilful treatment the usefulness of a limb may be permanently impaired by the disease, or it may require amputation, or the patient may lose his life altogether through pyæmia. On the other hand, the use of the limb and the health of the patient may become completely re-established.

Briefly, the pathology of acute periostitis may be summarized thus: The periosteum consists of two layers. The deeper which is applied to the bone is formed of delicate fibres of elastic and white connective tissue; it forms a kind of aponeurosis. The superficial stratum is much looser in texture and is made up of an areolar meshwork in which the vessels ramify and anastomose before penetrating the bone.

It is in this tissue that acute periostitis begins. At first it is swollen and red from vascular congestion; this is quickly followed by a rapid exudation of leucocytes and liquor sanguinis so that the membrane is converted into a purplish pulp.

The formed elements melt away and the débris mingling with the purulent exudation from the vessels, the abscess is fully formed. Thus we see that the periosteum is destroyed by the inflammatory process which meanwhile has spread to the surrounding soft parts (muscle, cellular tissue, skin, etc.) and has made them highly œdematous.

Etiology.—The disease is usually attributable to an injury, often slight, or to exposure to extremes of cold or heat: and here let me say that it has been my experience that an extreme cold following traumatism, almost invariably ensures acute periostitis. I shall subsequently quote one of my own cases in support of the above statement.

Symptoms—The earliest is sudden and severe pain in the affected bone which is soon followed by intense fever. On the second or third day swelling sets in, deep-seated and somewhat obscure at first; inflammatory signs approach the surface; the skin becomes œdematous and exquisitely tender, pits on pressure and finally reddens and inflames. The length of interval, of course depending on the thickness of muscles and soft parts covering the affected bone.

Other things being alike in respect of pain and amount of fever, the longer the delay in the appearance of external swelling, the greater the probability that the bone is the first and chief tissue engaged, the inflammation having reached the periosteum secondarily, while the early appearane of swelling and fluctuation externally, suggest that the inflammation is chiefly periosteal.

Diagnosis—There should be no difficulty as regards the diagnosis of acute periostitis; the only malady with which it need be confounded being an idiopathic inflammation of the deep-seated cellular tissue in a limb, and this disease is so very, very rare as to scarcely need elimination. Given the chain of symptoms above described in a young person, we may safely assume an osteoperiostitis. The disease almost invariably terminates in suppuration and necrosis; resolution happens rarely, but necrosis is not inevitable even after suppuration.

In speaking of the treatment, I wish to be very emphatic though of necessity brief. Incise down to the bone, dividing the periosteum. This is indicated even before pus has formed. Never wait for fluctuation or redness. If you don't hit pus with the knife you've done no harm and at any rate you have relieved tension and hence pain, and by permitting the timely escape of pus as soon as it does form the amount of periosteal separation and hence necrosis is limited. Enjoin entire rest