

power, and in six or seven weeks he was quite well. The lesion in this case was probably hemorrhage around the cord above the origin of the phrenic nerve, the pressure being greater on the right side.

The second case, which I saw with Mr. Hall-Edwards, was that of a young lady who was suffering from influenza, and I was called in on account of severe neuralgic pain in the right lower extremity. The pain was paroxysmal, and of such severity that morphine injections had to be given constantly. On my second visit I found the right half of the diaphragm paralysed. There was no dyspnoea and no alteration of the voice. We decided to apply a faradic current to the phrenic nerves, one pole being placed at the lower end of the anterior triangle in the neck, the other over the hypochondrium. The patient improved with this treatment for a day or two, then died quite suddenly. This was in my opinion a case of acute multiple neuritis, and the paralysis of the right half of the diaphragm was due to neuritis of the right phrenic nerve, the implication of the left nerve being the probable cause of sudden death.

The next three cases were all due to diphtheria, and were all fatal. I believe that paralysis of the diaphragm is the cause of the great majority of sudden deaths after diphtheria, and that only a few can be attributed to syncope. I believe also that in many cases the diaphragmatic paralysis is not recognized. Of the three cases, one was a man and the other two children. In all the cases paralysis of the legs was present, and there was no difficulty in recognizing the diphtheritic origin of the mischief, though in one case the sore throat had been very slight. While at rest in bed there was no dyspnoea, but phonation was very feeble and defaecation and micturition impeded. On examination of the abdomen the diagnosis was readily made. The hypochondrium on the affected side became depressed on inspiration instead of being propelled forwards, and by placing the hand under the ribs the non-descent of the diaphragm could be easily ascertained. There was compensatory overaction of the lower intercostal muscles and great enfeeblement of the breath sounds at the base of the lung on the affected side. In each case the right half of the diaphragm was chiefly affected, but I be-

lieve this is due to the presence of the liver on this side and to the inability of the weakened muscle to push the organ down, while on the left side the muscle can descend until quite paralysed.

In all three cases the paralysis was recognized a day or two before death, and special precautions taken, but in each case death occurred quite suddenly. One little boy was brought to my consulting room; observing the feeble cough and phonation, I had him stripped and examined the diaphragm; I found it paralysed. This enabled me to caution the parents of his grave danger, and I heard afterwards that he died suddenly the day after seeing me. If both halves of the diaphragm become paralysed, death ensues from asphyxia, and the fatality of diaphragmatic paralysis after diphtheria can easily be understood when we remember the severity of the neuritis which frequently follows diphtheria, some patients being paralysed for a year or more.

As to treatment I would recommend that every case of diphtheritic paralysis be kept in bed from the first, and that plenty of nutritious food be given. Iron and strychnine should be administered in large doses. If weakness of the diaphragm is observed the patient should be raised in bed with pillows, so that the diaphragm may act more easily. A gentle faradic current should be used three or four times a day and blistering fluid painted over the course of the phrenic nerve in the neck. Stimulants should be given freely.

The prognosis of paralysis of the diaphragm after diphtheria is very grave, and its onset may possibly be prevented by keeping patients in bed and at rest whenever any signs of paralysis are present. The early recognition of paralysis of the diaphragm is very important from a prognostic point of view.

The sixth case was that of a woman, aged 37, who was admitted for a second attack of alcoholic paralysis. The hands and feet were dropped, and the usual symptoms were present in a typical manner. The diaphragm was observed to be paralysed, and the patient died suddenly a day or two after this observation. I am not aware that paralysis of the diaphragm has been previously observed in alcoholic paralysis, or that it has been noted as a cause of