

abandoned, and we believe Jonnesco claims to have developed this method independently. It is quite certain at all events that the leading exponents of spinal anaesthesia have used the lumbar puncture entirely, and have taken special precautions to prevent the fluid from ascending too high in the spinal theca. Jonnesco, in cases where the operation is to be done on the head, neck or upper limbs, makes his puncture between the first and second dorsal vertebra, and the lower puncture, used for operations on the lower limbs, perinaeum, pelvis and abdomen, is made between the twelfth dorsal and first lumbar vertebra. The punctures are made with the patient in a sitting position with the spine strongly flexed. Afterwards the patient is placed in whatever position is most convenient for operation, and Jonnesco claims that the analgesia secured by his method lasts from one and a half to two hours, long enough for the great majority of operations.

These striking results of the distinguished professor of Bucharest were first brought distinctly before the surgical world at the Congress of the International Society of Surgery, at Brussels in September, 1908, and at once evoked keen criticism. At the German Society of Surgery, in Berlin, last April, Professor Bier declared emphatically against the method, and other prominent surgeons who employ spinal anaesthesia condemn the high puncture as a dangerous proceeding.

It is interesting, therefore, to note the reception which Dr. Jonnesco's method, as demonstrated by himself, has had in New York. In the *New York Medical Journal* of December 25th, 1909, we have a report by Dr. Virgil P. Gibney of cases operated on at the Hospital for Ruptured and Crippled, under spinal anaesthesia in-

duced by Dr. Jonnesco himself. In all the cases, four in number, the anaesthesia was satisfactory, and there were no symptoms, beyond nausea, vomiting and headache, such as may follow ordinary anaesthesia, and in one case, a hernia operation, the temperature rose to 102° , while 100° is the highest temperature known in the hospital after hernia operations. Dr. Gibney, while giving full credit to Dr. Jonnesco for the thoroughness of his method, and his dexterity in using it, gives us plainly to understand that he is not impressed by the claims made for it. He tells us that he has "long since abandoned spinal anaesthesia." For one thing his patients, as is natural in an orthopaedic practice, are rarely in the serious conditions of shock or of sepsis, in which general surgeons have frequently to operate, and he is also impressed with the danger of haemorrhage into the spinal canal through accidental puncture of a vein by the needle. He says: "I should hesitate a long while before I allowed any high injection of any solution into my spinal canal."

Four cases are also reported, in the same journal, from the clinic of R. T. Morris, at the Post-Graduate Hospital, and the opinion expressed by the reporter is even less favourable than that of Dr. Gibney. The first case was one of left-sided inguinal hernia, operated upon by Dr. Jonnesco himself. It was a difficult case and took forty-five minutes, and the anaesthesia was satisfactory for only half the time. The temperature rose to 102.4° . The second case was one of interval operation for appendicitis. Dr. Morris operated and the operation was completed in nine minutes. There were symptoms of shock for twenty-four hours, with pain in abdomen, restlessness, headache and loss of appetite for three days. These symp-