to probably pressure on the portal vein by a myeloid tumor. The ascites disappeared which he attributes to absorption of the leukemia and consequent relief from pressure.

A Method by Which Remedial Agents may be Mingled with the Spinal Fluid.—BALLANCE (*Lancet*, 1914, clxxxvi, 1525) describes the method in detail by which he introduced salvarsanized serum on five occasions into the lateral ventricle; twice in two patients and once in a third patient. No ill effects have occurred from the injection of the serum but Ballance says that only a large experience could justify a claim that this method would cure or arrest cerebral or spinal disease, as typified in general paresis or tabes.

The Intrathecal Injection of Salvarsanized Serum.—SPENCER (*Lancet*, 1914, clxxxvi, 1531) concludes that the intrathecal injection of salvarsanized serum offers a hopeful method of treating and arresting the progress of tabes and other parenchymatous diseases of the spinal cord. Before its introduction these cases resisted all efforts and finally drifted into the asylums and work-houses. A cure of the lightning pains can almost definitely be promised. The injections, if carried out with especial aseptic care and technique do not endanger the patient's life. There is a great future before this treatment when further work has been done in perfecting it. The cure of a condition, which has previously baffled all efforts, merely because the pathology has not been fully understood, is now possible by working on definite scientific lines.

The Intrameningeal Treatment of Tabes and Cerebrospinal Syphilis.—BOGGS and SNOWDEN (*Arch. Int. Med.*, 1914, xiii, 970) reports eight cases of cerebrospinal syphilis treated by intrameningeal injections of salvarsanized serum. The technique used by the authors differed in one important point from that recommended by Swift and Ellis. They injected undiluted serum in amounts of from 25 to 35 c.c. after preliminary intravenous injection of 0.6 gm. of salvarsan. Thus the average single dose was about double that given by Swift and Ellis. The authors state that, from the results in their series of cases, it is evident that the intraspinal method is a step forward in the treatment of tabes and cerebrospinal syphilis. The patients were uniformly relieved from pain, and as far as locomotion was concerned there was a slow but definite improvement, in some instances amounting almost to restitution to normal. In this respect their cases seemed to do better than those of Swift and Ellis, perhaps on account of the larger doses of serum. The psychic effect of the treatment was also marked. The patients became encouraged by the quick relief of pain and the first improvement in the control of motion and were faithful in their efforts to use the legs and practice walking, stair climbing, etc. The nutrition also rapidly improved under these stimuli. The effect of the treatment on the cerebrospinal fluid was very striking. The cell count first fell to normal, the Wassermann reaction becoming negative some time after the cells were reduced. The Noguchi reaction seemed of less value as an indication of improvement, since such large amounts of globulin were injected into the spinal canal. The authors