

from only one on the right side. After thrombosis of the superior vena cava blood would reach the heart by enlarging the inosculation between the intercostals, and between these and the azygos veins.

*Discussion on Paper.*—Dr. Osler thought the only rational explanation of the affection was a phlebitis excited by inflammation in contiguous parts. He would not, however, attribute the same importance to the valvular opening between the auricle and ventricle as Dr. Wilkins had done; he had frequently seen this condition with an orifice of considerable size, and without giving rise to any symptoms.

Dr. Ross asked if it was not a fact that a small tube had been used in this case for continuous drainage, and had been followed by pleurisy. He had seen a case of ascites treated in this way, after tapping had been performed in the ordinary way without ill effect on two occasions; followed by fatal peritonitis in 48 hours. He was inclined to think this method was not altogether safe. In these cases is the inflammation the result of irritation or the inadvertent entrance of germs?

Dr. Roddick also asked how the occurrence of inflammation in these cases could be explained. He doubted if these short tubes always reached the cavity, and spoke of the possibility of their slipping back, and by their constant irritation of the peritoneal or pleural surface setting up inflammation.

Dr. Osler also mentioned a case of abdominal dropsy drained in this way and followed by fatal peritonitis.

Dr. Ross, in reply to Dr. Osler, said that Southey recommended his trochar only in conditions of anasarca, but that others had recommended its use in draining serous cavities also.

Dr. Hingston spoke of the great risk always attending puncture of the abdomen, either with or without a tube, and cited a case where death had followed a simple puncture in three or four days.

Dr. Roddick thought that in the case of ovarian dropsy, the operation of tapping should always be approached with great caution. He believed that an exploratory incision with antiseptic precautions was, as a rule, less likely to be followed by mischief in these cases. With regard to the operation of tapping in ordinary abdominal dropsy, he was in the habit invariably of closing the puncture with a catgut suture and dressing it with iodoform, as he had seen at least one case in which septic

peritonitis followed tapping where a leakage was allowed to go on for some hours.

Dr. Bell thought the history of the case did not show it to have commenced with a severe enough illness to have been a *phlebitis* and subsequent thrombosis at the time of the accident. Might not the cicatricial tissue which was found partially surrounding the vein, and which was probably the result of laceration of tissue and inflammatory action at the time of the severe strain described by the patient as the starting point of his illness have acted by constricting the vessel so as to retard the blood current, and thus cause a thrombosis which was followed by phlebitis? The history of the case seemed to show that the phlebitis was acute and recent when admitted to hospital, while he attributed his illness to an accident twelve months previous. The aspirations of the chest as shown by the report had been performed a great many times without any unpleasant consequences. The first time the *Southey tube* was used it remained *in situ* for twenty-four hours and then slipped out. After twenty-four hours it was again introduced, and in a few hours was followed by signs of pleural inflammation. He thought the continuous presence of the tube was the cause of this inflammation, and considered that it was almost, if not quite, impossible to leave a tube in any cavity for any length of time without air entering in at the sides, more especially in the pleural and peritoneal cavities where the action of the lungs and diaphragm exercised as it were a constant suction.

Dr. Wilkins, in reply to Dr. Osler, stated that he could quite understand, other conditions being all right, how a permanent foramen ovale could be unattended with interference in the usual course of circulation, but as soon as the current from above was cut off, the current from below would lift up the upper segment of the annulus ovalis. Dr. Wilkins shewed the patient's heart with this projecting considerably, and said, supposing a force pump attached to inferior vena cava, before opening the walls of the heart and water pumped in, it would be impossible to prevent it passing through into left auricle, there being no counter current from above. The projecting upper segment of annulus is directly in the course of the fluid from below, and as it must exercise pressure on the lower portion before it reaches the upper, it will unavoidably open the valvular orifice and allow escape into the left auricle. In reply to Dr. Bell, Dr. Wilkins said, in the absence of any tumor, the