

replacement of the heart as the lung re-expanded. This case will be reported in full at a later date.

(6) Major Ower demonstrated specimen of trachea and lungs from a fatal case of the so-called mustard gas poison.

(7) Captain Fraser showed a case of shrapnel wound slightly to the right of the mid-line of the back of the skull. The case showed still persisting very marked left hemianopia. The condition had improved, though it is probable some degree of impairment of vision will always remain.

The Society then adjourned to the surgical wards, where Colonel Bowie showed several cases of knee-joints which had been treated by opening up, washing out and closing. The majority of the cases had done very well. He also showed a compound fracture of the right arm treated in the same way with good results.

Two interesting cases of abdominal wounds requiring resection of the intestine were shown. The cases had been doing very well as far as their operations were concerned, but had developed bilateral conditions in the chest, suggestive of bronchopneumonia or the collapse of the lung after abdominal operation, where the free action of the diaphragm is interfered with.

*Meeting of November 15, 1916.*

(1) Specimen from autopsy. Wound of the brain. Demonstrated by Major Ower.

Brain showing large ulcerating tract in the frontal lobe. Case had died shortly after admission. There were no clinical notes attached.

(2) Auricular fibrillation and V.D.H. Electro-cardiogram. Demonstrated by Captain Logie.

Colonel Sir John Rose Bradford discussed the case. He spoke largely of the discovery of auricular fibrillation.

Captain Moffat also spoke, and pointed out that in the cardiogram there were several well-marked phases of heart block. The case would be shown again at a subsequent meeting.

(3) Case of massive collapse of the right lung. Demonstrated by Major McDermott.

When the patient came in he showed pain over McBurney's point; loss of appetite; rise of temperature; pulse 104. Three days later the pain was still there, and he was feeling no better. Operation performed; given general anæsthetic. Operation did not take very long, and the patient went through it quite well. That evening, about two hours after coming out, he had a sudden sharp pain over the front of his right chest and great shortness of breath.

Seen by Major Gwyn, had following signs:—

Dulness to percussion over right lower back; vocal fremitus increased with hollow tubular breathing and fine râles. Owing to the darkness of the tent the inspection was interfered with, and the man was transferred to a hut ward, with the provisional diagnosis of post-operative broncho-pneumonia, or possibly beginning collapse. Two days later all the typical signs of massive collapse of the lung were present. The heart was entirely displaced to the right side, and the whole lung was solid; the whole chest sunken in. By next day there was marked change in the physical condition, there being well-marked resonance over the upper right front. It may be noted in passing that a day or two later this resonance was again replaced by absolute dulness and signs of collapse.

Sir John Rose Bradford discussed the case. He stated that before the War the condition was usually seen after abdominal operations. It occurred in cases where a general anæsthetic was given, and in cases where no anæsthetic was given, such as diphtheria and paralysis. Within twenty-four hours after operation patient with or without urgent symptoms sometimes developed signs of consolidation. Case might be mistaken for pneumonia. Collapse would be recognized by displacement of the heart. There was no expectoration usually at beginning, but later on. This is one of the reasons why it is apt to be confounded with pneumonia. Expectoration is different to that of pneumonia.

Sir John instanced cases of bullet wounds of a trivial nature which were followed by complete collapse of the lung opposite to side of injury. He stated there had been a considerable number of such cases, in nearly all of which the lung opposite to the side struck has been involved. The physical signs in the lungs are of two types. One set of cases where there is immobility and retraction, dulness on percussion, weakness, or extinction of breath sounds. These cases are very difficult to recognize, especially if ward is noisy.

The other type is quite easily recognized, having loud tubular breathing, more often amphoric. The signs change. One day there is weak breathing; next loud amphoric breathing. These signs are associated with the displacement upwards of the diaphragm. They last about three weeks or a month; sometimes only a few days. The condition is not due to the severity of the injury, but to injury of the chest wall. It is not limited to chest injuries. There is limitation of movement of respiratory muscles or bronchial obstruction. The diaphragm is high on the injured side. There are various complications. Quite often there is pleurisy and sometimes lobar pneumonia.

(4) Cases of thrombosis of the veins occurring as complications in wounds involving the chest.

Captain Bunn showed two cases in Ward "E," in which thrombosis of the veins with probable infection gave rise to some doubt as to what might be going on. There had been seven such cases in the ward in the last few weeks, and, generally speaking, they were of one of two types: one where the wound had involved the veins, the other where the thrombosis seemed to occur as symptoms of general septicæmia. The symptoms and physical signs were the same in both, viz., high and intermitting fever, with œdema, redness, and heat of the area of thrombosis. The others had progressed favourably. In six the arm alone was affected; in one the thrombosis was in the veins of the leg.

*Meeting of November 22, 1916.*

(1) Auricular fibrillation and V.D.H. Electro-cardiogram. Demonstrated by Captain Logie.

The case had been presented the previous week.

With regard to the present condition, Captain Logie said that the patient having passed a period of rest, the pulse had steadied down, but upon the slightest excitement it becomes irregular again. The heart is practically the same. In connection with the question which arose as to the presence of a second murmur, it is uncertain whether such is present or not.

Captain Moffat again discussed the case and spoke of digitalis treatment. He stated that clinically digitalis acts best and only in such cases as the present. At the Rockefeller Institute in New York the conclusion had been drawn that digitalis in any form has practically no effect on normal animal hearts. Its main effect is in such cases as auricular fibrillation. This view, however, is not held by all.

An unusual case brought into hospital some years ago was described. The patient had been shot through the pericardium with a revolver. The bullet went through and penetrated pericardial sac. The man had definite signs of fibrillation. The bullet was localized with the X-ray, and found posterior lying up against that organ.

Captain Moffat demonstrated the action of digitalis and its relation to ventricular contractions.

Captain Seaborn also spoke briefly. He laid stress on the fact that there must be a cumulative effect before a full result could be obtained.

Captain Barrager asked a question dealing largely with the myogenic and neurogenic origin of the heart impulse, and the position in which the treatment by digitalis now stood when considered in relation to the various theories of origin of heart impulse.

This was replied to by Major Gwyn and Captain Moffat.

(2) Massive collapse of the right lung, following abdominal operation. Demonstration by Major MacDermott.

The case had been shown last week.

The patient is now showing considerable improvement in his breathing, and at present has no distress. Still has a little cough. Sputum is fairly free. Chest is now very much clearer. The heart is back to the left side, and the breathing sounds, although very faint on the right side, are not so amphoric as they were. Diaphragm is a good deal lower.

Major Gwyn, in speaking of the case, said the most striking thing is that the heart borders and sounds are still away over to the right. There is dulness with increase of vocal fremitus. Breath sounds are now very tubular and loud. Front has been free, and collapsed, free, and collapsed again. Resonance is coming back.

(3) Arterio-venous aneurysm. Demonstrated by Major Gwyn.

A very interesting case of arterio-venous aneurysm following bullet wound. Case had little or no symptoms. There was a very distinct systolic thrill. Showed no secondary