

Double amputations are comparatively numerous. I have personally performed fifteen such operations, this number not including two successful cases of double partial amputation of the feet. I have done fifteen double major amputations, of which five have ended in recovery. One of the patients who recovered, I had the honor of exhibiting to the College some years ago; the amputations in his case were through the right hip joint and through the left leg. In the fatal cases, seven of the deaths occurred within less than one day, and were, therefore, the immediate result of the shock of the injury and of the operation. Three patients died, one in three days, one in four days, and the third in eighteen days. The latter would probably have recovered, but that he also had suppurative disease of the middle ear, which appeared to be the cause of the pyæmia which proved fatal; for when the stumps were examined, after death, they were found to be in good condition.

With regard to what I have termed the technique of multiple amputations, there are some points which my experience justifies me in urging upon surgeons as of importance in promoting success. In the first place, it is very important that the time occupied by the operations should be brief; that the operations should be done systematically, so as to keep the patient under the anæsthetic as short a time as possible, the next point, perhaps of even more importance, is to keep up the temperature of the patient during the operations. I have been led to think that this is, perhaps, of more importance than anything else. Of course, loss of blood must be scrupulously guarded against, and loss of blood directly causes loss of temperature. In this case, hot cans were kept around the patient during the entire operation; and, in order to save time, I operated systematically, the tourniquet and Esmarch bandage being both employed to prevent any loss of blood. I began with the most serious injury, and this is, I think, a point of importance. It may happen that, after the removal of one limb, it will be found that further operation must be postponed on account of the patient's condition, and then it is, of

course, better to leave him with the less serious injuries. In this case I began with the thigh. After amputating the limb, I secured the main vessels, which were readily found. I attempted to tie the arteries with catgut, but as the ligatures broke, I substituted silk, and, in order to save time, left both ends uncut. I next amputated the right leg, securing the vessels in the same manner, and then passed to the forearm. I then came back to the right thigh, screwed up the tourniquet and removed the Esmarch bandage, and secured all the vessels that required ligature, then passing to the other limbs in the same order as before. After the vessels had been secured in each case, a towel dipped in a hot antiseptic solution was placed between the flaps. The wounds were then dressed in the same order, and in this way the operation was completed in a comparatively short time.

The points which I have mentioned I believe to be of great importance, and I think that much of the disappointment of surgeons from these operations is due to a want of attention to these matters.

I should also say that, in order to preserve the bodily heat, I did not use irrigation during the amputations. I think that this often seriously reduces the temperature; and even in comparatively slight operations where it has been used, I have seen the temperature fall to 97° F., and even 95° F. I think that in any grave case, it is better to omit it, and to rely upon washing with hot antiseptic solutions before and after the operation. Also, the packing of wet towels around the seat of operation, as is very commonly done, tends to depress the temperature, and in grave cases should be omitted.

I think that it is to an observance of these precautions that I have owed success in this case, and in many other serious operations of various character.—*Poly-clinic.*

COMMUNICATION.

To the Editor of the Lancet.

From recent correspondence, which appeared in one of our daily papers, relative to a Maternity Hospital, which, I think, was signed by one or more of the directors