

the dawn of antiseptics, its progressive tendency did not permit Listerism to rest upon its achievements. The advance movement was primarily manifested in bacteriological investigations, and in 1888 Robert Koch was able to announce, and prove by indisputable evidence, that the microbes found in the air were mainly of an innocuous character. With the acknowledgment of this fact came the downfall of the spray and the birth of asepsis.

Under a conscientious practice of this method delicate structures are now saved from contact with toxic substances; wounds are found to heal without reaction; skull and abdomen are opened without thought of danger, and operations are now performed daily which in the past would not even have been dreamed of by the most daring surgeon. The successful results which attend these operations are in a large measure the result of a careful operative technique, and the proper care of the patient before, during, and after operation. It is true that with experience comes increased manipulative skill on the part of the operator, but often the greatest danger to the patient lies not in the accidents which arise from the defects in manipulative skill as in the carrying into the wound pathogenic organisms, the result of a faulty technique. In order to carry out with any degree of certainty an aseptic technique, it is necessary to have a well-organized staff of assistants and nurses, each knowing his or her place, and the work expected of them.

The members of the staff and nurses are arranged as follows:—The first assistant stands opposite the operator and helps him directly. By his side stands the second assistant (a nurse) with the sponges, etc. The third assistant (a nurse) stands by the side of the operator, in charge of the instruments, needles and ligatures. The fourth assistant has charge of the anæsthetic and devotes his whole time to that duty. The fifth assistant (the outside nurse) watches for opportunities to be of service to the surgeon or his assistants.

A. PREPARATION OF THE PATIENT BEFORE OPERATION.

1. Whenever it is possible it is best to have the patient under observation for a few days previous to operation, in order that an acquaintance may be made with the condition of the various organs of the body. A thorough physical examination is made, and the urine, and if necessary the blood, carefully examined.