

shock can be less correctly applied is when a very large quantity of fluid or a very large tumor is suddenly removed from the abdomen, the support which the abdominal veins have in the course of months or years gradually grown accustomed to is thus taken from them. There is a rush of blood into these unsupported veins, and the same phenomena are observed as when the great sympathetic is irritated. And yet this is not really shock, because it is not a nervous condition but more truly a hemorrhage. This variety of shock, which has killed many a patient in former times, when large tumors were plentiful, can be easily prevented in several ways; first by removing gradually the pressure to which the veins have been accustomed, by emptying very large cysts when possible on the day previous to the operation, by tapping with a small trochar, as I did on one occasion in an old lady from whom I extirpated two large carcinomatous ovaries weighing five or six pounds each, and who was besides greatly distended with ascitic fluid; two buckets of water were removed in two hours without any inconvenience, and next day the operation was performed absolutely without shock, the patient speedily recovering from the operation. When the tumor is solid and cannot be lessened in size by tapping, there are two other means of preventing this form of shock, or hemorrhage into the veins. One is by performing these abdominal operations with the patient in the Trendelenburg posture, so that the blood from the limbs and even from the abdominal veins, may flow by gravity towards the heart and brain; and the other by filling the abdominal cavity, immediately on removing the tumor, with normal salt solution, which not only supports the thin-walled veins, but also, by osmosis being absorbed, so fills the vascular system that the abdominal veins may be filled with impunity. Still two other methods have been employed in my cases with advantage: one being to have an assistant trained to transfer normal salt solution, one teaspoonful to the pint, directly into the median basilic vein; the other, which I employ almost constantly, to gently inject a quart of normal salt solution into the rectum with a fountain syringe, hung only a foot or two higher than the rectum, so that, entering slowly, the liquid may be tolerated and absorbed, which would not be the case if it were injected quickly.