

monia, and at the necropsy, aneurism of the innominate, and transverse portion of arch and dilatation of descending aorta, as far as diaphragm, were found.

For our knowledge of the mortality arising from the ligature of the principal arteries, we are largely indebted to Dr. B. G. Norris, who has carefully prepared a series of excellent articles upon this point, and originally published them in the *American Journal of the Medical Sciences*. They do not seem however to have yet received that attention to which they are entitled by their importance. Mr. E.'s work is the first of the kind in which they have been referred to; but even there they have not been turned to as much account as they might have been. And to one of the most valuable, the subclavian artery, it makes no allusion whatever. Dr. N. collected together 69 cases in which the operation had been performed in some one part or other of the subclavian's course; 36 recovered and 33 died. 56 were for the cure of aneurism, 3 for diseases supposed to be aneurismal, the remainder for various accidents. The mortality was greatly dependent upon the particular part tied, the best chance of recovery always being when the operation was performed between the external border of the scalenus muscle and the first rib. In some of the cases the ligature was a long time in coming away; in one it did not separate until the 85th day. It is worth remembering that even the most celebrated operators have failed in their efforts to pass a ligature round the subclavian. Suffice it to record, that Dupuytren after laboring for an hour and 20 minutes, believed he had succeeded in tying the vessel in its third stage, though there had been no arrest of pulsation. The patient, who had a very large aneurism, died on the 9th day, and then it was discovered that the ligature was loosely knotted on that portion of the fourth cervical nerve, which afterwards becomes the musculo-cutaneous nerve, and the artery was not included.

Two years ago, M. Roux set an example which every surgeon might profitably follow. He detailed in *l'Union Medicale* the results which had attended his numerous applications of the ligature to the large arteries, during a period of 48 years; and although the circumstance is not mentioned in Mr. E.'s work, we may take this opportunity of alluding to it. M. Roux ligatured 82 arteries, of these 49 were for aneurisms; of these latter 33 were for true, 10 false, and 6 arteriovenous aneurisms. All but 2, which were successful, were treated by Hunter's operation. Of the 33 true aneurisms, 31 occurred in men and 2 in women; 23 were cured, and 10 treated without success. In 2 cases superficial, and 2 complete gangrene occurred. In 4 secondary, hemorrhage took place, viz., on the 4th, 22d, 34th, and 50th days. All the false aneurisms arose from venesection, and were cured. 2 of the arterio-venous aneu-