part included by the ligature is killed, it sloughs, and is separated by a process of ulcerative absorption. Then he dwells upon an effusion of lymph taking place around the artery, and supporting the internal coagulum, as if there was something novel in this, whereas this has been always, at least, long known and taught here. Whether there is an internal coagulum or not, you always have lymph effused around the ligature, from the outer coat of the artery, upon the outside of it, and this, in the first instance, unites the ends of the artery, which is cut through by the separation of the ligature. Mr. Arnott would not have made these remarks, but he did not think the society should be allowed to adjourn under the notion that there was anything new, or of importance, in the remarks of Dr. Warren, which only contained doctrines with regard to the union of arteries long known and taught in this country.

Mr. Quain observed, that there was a point or two of practical importance, connected with the valuable case detailed by Dr. Warren, to which he desired to direct attention. The first that he would notice had been alluded to by the last speaker, Mr. Arnott, who said that the "rule of practice," in case of bleeding from an artery, was to cut down to the vessel at the place where the blood issued from it, and tie the vessel above and below the wound, but that the case under consideration was an exceptional one. He (Mr. Quain) apprehended that the rule of practice mentioned by Mr. Arnott applied to wounds and recent cases. He was of opinion that this rule did not apply to cases in which there was inflammation with extensive swelling, suppuration, &c. To cut down through such parts, in order to tie a vessel, altered as it would under such circumstances be, could scarcely be admissible.

The next point he thought deserving of notice, was the place at which the ligature had been applied to the artery. The vessel was tied beneath the scalenus muscle, and it was sought for in this position, because the operator could not reach it on the first rib. He was of opinion, that when there was any difficulty about placing the ligature on the vessel where it rests on the rib, it should be made a general rule to seek it beneath the scalenus, or after it has passed beyond the muscle, and before it approaches the tubercle on the ribs. This part of the artery is higher, much higher in some cases, and on this account more accessible (the clavicle being elevated) than where it rests behind the tubercle on the rib.

In illustration of the advantage of the course here recommended, he cited two cases, which occurred in the practice of Dupuytren. In one of these, the first (he believed) in which that surgeon operated on the subclavian artery, he placed the ligature on the part of that vessel which is behind the scalenus. The result was in all respects favourable; and an account of the case was published by Dupuytren. The second operation was performed a short time after that just referred to, and the intention was to tie the subclavian on the rib. In this instance a large nerve, with half the artery, was included in the ligature. The aneurism needle had been passed through the vessel. The patient died of hæmorrhage in a few days. The history of this case was not, that he was aware of, published by Dupuytren; it was communicated to the *Edinburgh Journal* by Dr. Rutherford, who was present at the operation. He referred to another case, in which Sir A. Cooper failed to tie the same artery on the first rib; and from these facts he drew an inference in support of the plan of operation above noticed.

With respect to the case to which Dr. Warren made reference at the end of his paper, that in which he tied the common femoral artery in consequence of hæmorrhage after amputation of the thigh, and with a favourable result, he observed, that he could not regard that as the operation which afforded the fairest prospect of a successful termination in such cases. He had, in one instance, seen that operation followe dby secondary hæmorrhage, which was arrested only by tying the external iliac artery. The unfavourable result of operations on the common femoral artery was shown in a paper he had the honour of communicating to this society from a friend of his, Mr. Hadwen. Operations on the external iliac artery were much more frequently successful.

Mr. Fergusson agreed in the remarks made by Mr. Arnott with respect to secondary hæmorrhage, and considered that the author had placed more importance than was necessary on tying the artery at a distance from the principal branches. Such a proceeding was by no means novel, as it had been a commonly taught doctrine ever since the time of Jones. He (Mr. Fergusson) was inclined to place less importance than was usually done on the internal clot, for ample proof existed that a vessel might close after the application of a ligature near a large branch. Mr. Porter of Dublin, had tied, with success, the right carotid within an eighth of an inch of the innominata; and the internal iliac and other arteries which had been tied with success, showed that arteries might close by adhesive inflammation, though immediately contiguous to such a stream of blood as passed through the innominata. He had a great respect for Dr. Warren, and spoke with great deference of that gentleman, but he could not help thinking that more had been made of this case than was necessary: he could not indeed see any practical deductions which were not well known to all practical men in this country. Many interesting circumstances had undoubtedly occurred in the case, but there was nothing which was not ordinarily alluded to in lectures on surgery. He referred particularly, however, to two points in Dr. Warren's paper. One had reference to the conviction that the pleura was wounded. Now it did not appear to him (Mr. Fergusson) that the symptoms detailed made this a matter beyond doubt. Dr. Warren had spoken of this accident as though it were not uncommon, but he (Mr. Fergusson) thought it did not often occur. Indeed, the only case which then occurred to his memory, was the one which was under the care of Mr. Colles, but in this instance the subclavian was tied on the right side, between the trachea and scaleni muscles, whilst in Dr. Warren's case the vessel had been secured over the first rib; he thought the pleura was in little risk from the latter operation, even though the anterior scalenus might, as it did in this case, require division. The statistics appended to this paper would correct him (Mr. Fergusson) if he were wrong regarding the frequency of wounds of the pleura. The second point he wished to refer to was, the peculiar sound of the heart which was mentioned—a sound which he might safely say was quite unknown to practitioners in this country.—*Lancet.*

PRACTICE OF MEDICINE AND PATHOLOGY.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—November 11, 1845.

Dr. Chambers, President.

On the minute anatomy and pathology of Bright's disease of the kidney, and on the relation of the renal disease to those diseases of the liver, heart, and arteries, with which it is commonly associated. By George Johnson, M. D., of Kings College, London. (Communicated by R. B. Todd, F.R.S.)

The author began by stating that the true nature of Bright's disease was, he believed, to be found in diseased state of the secretory or epithelium cells which line the urinary tubules. He arrived at this conclusion in the first