respiration, or of the heart, one or all of which would have presented symptoms if an aneurism of the aorta had perforated the sternum. But there were these characters connected with the tumour itself which helped to decide its nature:—1. Its beat, though remarkably powerful, was too prolonged to be aneurismal. It was quicker indeed, and greatly stronger, than the beat at an infant's fontanelle, but it was not abrupt, not instantaneously expansive enough to have been aortic. 2. An interval of time could be perceived between the impulse of the heart and that of the swelling. This could not have been the case if the blood sprang forth at once from the left ventricle into the tumour, but was quite consistent with the supposition that the latter was fed by the way of the internal mammary arteries. 3. In the interval between two beats the tumour could be felt under steady pressure to be solid, not fluid. 4. The sound which was heard on ausculting the tumour, so far as it could be distinguished from that of the subjacent heart, was similar to that of an aneurism, but it differed from the recognised *bruit* in having less roughness and intensity.

Some years ago I had the opportunity of observing the commencement of pulsation in a tumour. A man came into Forbes' ward with a swelling of one knee. At first sight it looked like a disease of the joint; but a closer examination showed that the inequalities of its surface were not produced by a distension of the synovial membrane, but were lobes of a tumour. It was all hard and bony, except at one spot, where a prominent lobe was elastic, and, when pressed, was felt to crackle like parchment. Whether the disease were myeloid or malignant was uncertain; but it was already quite clear that it could not be aneurismal, when one day the largest prominence, which had been increasing in size, began to pulsate. Compared with the beat of an aneurism in the ham, that of the swelling from the bone was soft and slow. It gave no pain, did not expand, and presented no *bruit*. I amputated the limb, and the disease, as you may see by the specimen preserved in the museum, was encephaloid.

These tumours did not pulsate because they were encephaloid. Placed in soft parts such masses have no beat; nor have other tumours which are more vascular than these. In a paper on these particular tumours of bone in vol. xxviii. of the "Medico-Chirurgical Transactions," Mr. Stanley described the pulsation as sometimes, in great part, occasioned by large blood cavities in the tumours, with which the arteries were presumed to have freely communicated. There were no such blood-cells in the tumours just described. Their vessels were large, and the tissue in which they lay was soft, and expanded easily. The pulsation seems to have been due, therefore, to the accidental position of the tumours. What was this? They were enclosed in bone, except at a part of their surface. So soon as the bone had given way, the vessels of the tumour, no longer pent up within an unyielding structure, expanded freely at each systole of the heart. Their separate impulse was not perceptible at the surface; but all the force and extent of their beat cumulated into a pulsation, which was strong or weak in proportion to the vascularity of the tumour. The power of the impulse, as Mr. Stanley has shown, and as you have felt, may equal that of an aneurism.

That this is the correct explanation appears proved by the fact that the same symptom is produced in other cases by like circumstances. If, for instance, an abscess in bone, having one narrow outlet, be filled with pus, the matter may be seen to rise in the opening at each pulse, even the small vessels of the granulations which line the abscess expanding sufficiently to produce the symptom. A decided pulsation, again, in a fluid swelling on the head, can be regarded as proving that the fluid has come from within the cranium. The mechanism by which this is produced I need not again explain; but its force you will remember by what you noticed in Mr. Shaw's recent case of encephalocele.

II. Here are two examples of a second kind of pulsating tumour. Each is formed of a cluster of diseased glands, and each situated in the bifurcation of a large artery. In the one instance, the mass, as it grew, had parted the internal and external carotids, which curve closely beside, and make one tumour with it. This far greater swelling also—a collection of cancerous glands—has a somewhat similar relation to the common iliac artery. Its external branch arches high over the huge mass, the internal iliac is close behind it, and the chief branches of the latter artery go through it. I can say nothing of the kind of pulsation in the first case, for I did not feel it; but that in the latter was very powerful. The tumour rose at each beat, expanding the fingers which grasped its superficial convex part; and the entrance of blood into it was audible through the stethoscope as a *bruit*.

The mere proximity of glands to an artery does not suffice for the conveyance of pulsation to them. You saw, a day or two since, the case in Seymour ward to which Dr. Thompson called me. A number of glands were enlarged, without running together into a common mass. The right subclavian artery passed amongst them, and seemed raised higher in the neck by them. They pushed forward also the common carotid and the innominate arteries. Yet a very slight examination convinced us all that the unusual general pulsation above the right clavicle was not that of an aneurism. Any single gland could by pressure be isolated, and could be felt free from pulsation, while the real beat could be defined to occur only in the course of the displaced arteries. Something more, then, than mere contact is requisite to convey to a tumour a deceptive pulsation. The vessel and the mass in its neighbourhood must be, as it were, identified, so that their pulsation should be really common. We find accordingly that such tumours have the relation to the bifurcation of an artery which I have already spoken of, and are moreover compressed together with it in a tight fascial envelope. In proportion to the number and size of the arteries within the fascia must be the force of pulsation in the entire tumour, which will also be further increased on one side if the other side happen to rest against a bone. All these sources of fallacy existed in the case of this inguinal tumour; and I was led, as you see by the specimen, to tie the common iliac artery. I have no doubt that the bursting of the fascial covering, unlike the destruction of the bony covering in the first class of cases, would have stopped, instead of developing, the pulsation.

III. There is another kind and cause of pulsation in tumours, which may be best illustrated by the "pulsating bronchocele." It is a short, sharp, tremulous beat, which is felt as the blood enters the tumour, but which does not expand it. The arteries all over the body beat in the same manner, with a violent yet feeble kind of agitation. I cannot suppose that you would be led by this pulsation, vigorous as it seems, to imagine a bronchocele to be an aneurism, when you had once noticed the general state of the arterial pulse, and had recognised the plain characters of the tumour. It is not impossible, however, that when such a pulsation occurs in a number of large vessels near together and at some depth from the surface, some perplexity might occur. The epigastrium is a region where such vessels and certain perplexing and temporary pulsations, apparently of this sort, are met with.

ON HÆMOPTYSIS IN INFLUENZA.

By ARTHUR LEARED, M.D., M.R.C.P.,

PHYSICIAN TO THE ROYAL INFIRMARY FOR DISEASES OF THE CHEST.

THE occurrence of hæmoptysis, independent of organic disease of the lungs or heart, or of menstrual irregularity in the female, must be regarded as very unusual. Streaks of blood are occasionally seen in the sputa in cases of chronic bronchitis, when the cough is violent; and, exceptionally, the quantity of blood is considerable. Within the first two months of the present year I have met with four cases in which hæmoptysis happened in the course of influenza. I have thought so unusual a circumstance worthy of being recorded.

CASE 1.—A lady residing at Notting-hill was, early in January, rather suddenly seized with catarrhal symptoms, attributed to cold taken in church. Cough occurred in violent fits, and the sputa were either viscid or frothy, but at no time presented the pneumonic character. Pure blood, in small quantities, was coughed up at intervals during the course of three or four days. There was a good deal of general debility, she had frontal headache, and the digestive functions were much disturbed. But the symptom most complained of was constant pain beneath the centre of the sternum, shooting backwards between the shoulders. The pulse was frequent, but weak. With the exception of diffused sonorous râles, I could detect no physical signs after a most careful examination. It may be mentioned that this patient was pregnant; and also that, having been consulted on previous occasions, I can speak the more positively as to the non-existence of phthisis. The treatment consisted of salines and beef-tea, sinapisms for relief of the sternal pain, and diluted croton oil for the bronchial affection. The chest symptoms soon yielded, but debility continued some time.

CASE 2.—At the time my attendance upon the previous case

commenced, I was requested to see a young lady, of vigorous constitution, many of whose symptoms were remarkably similar, although more severe. After having complained of catarrhal symptoms with frontal headache for some days, she began to expectorate blood. This expectoration continued at intervals throughout four days, and, as far as could be judged from the handkerchiefs she used, to the extent of about a drachm of blood at a time. No pneumonic sputa were observed.

Pain, in this case, was both constant and severe. Its focus was about two inches to the right of the mid sternum, and it passed through to the back. There was not much cough, but frontal headache and debility were very marked. Occasionally the patient was delirious at night. In the situation from which the pain emanated I detected a very slight friction-sound, which lasted but a short time. There was no other physical sign of moment.

The treatment consisted of tartarized antimony with morphia; strong beef-tea and wine when needed. Sinapisms were found ineffective against the pain; but it was greatly relieved by the application of bran poultices as hot as could be borne. Her illness continued about a fortnight, and convalescence was not protracted.

CASE 3.—About the middle of January I saw in consultation with Mr. Lemon, of the Caledonian road, a patient whose symptoms were in several respects similar to those of the two foregoing. She was a delicate, anæmic looking girl, and had been suffering for a few days from cough, with catarrhal sputa, frontal headache, and general debility. Her mother informed us that on the day previous to our visit the patient had coughed up a little pure blood. She complained also of pain under middle of sternum, passing to the back. We could discover no physical signs, except slight jerkiness of respiration, yet there was no reason for suspecting phthisis. We decided on giving quinine with morphia, beef-tea, and, if necessary, wine; hot bran poultices for pain.

I subsequently heard from Mr. Lemon that the patient soon recovered, and that hæmoptysis did not recur.

CASE 4.—In this case I had the valuable assistance of Dr. Hess, of Artillery-place. In the beginning of February, a gentleman of middle age, and good although not robust constitution, was somewhat suddenly seized with cough, mucous expectoration, oppression at the chest, and frontal headache. After a few days he began to expectorate blood, and felt pain at a point about two inches below the right nipple, and a little towards the same side. This pain was severe and persistent, but the hæmoptysis continued longest, and more than a week elapsed before it entirely ceased. The sputa were at first viscid, but gradually became thinner and frothy. Blood never came up unmixed, but was frequently sufficient in quantity to completely colour the other expectorated matters. Hæmoptysis would be repeated often in the day, and always occurred on awaking in the morning. With the exception of a doubtful friction-sound, slight deficiency of respiration at the affected part, and a few sonorous râles, we could detect no physical signs. The treatment consisted of salines, counter-irritation, hot bran poultices, beef-tea, &c.

This gentleman's illness lasted about a fortnight. By the aid of tonics and change of air he convalesced satisfactorily.

The question may be asked, were these cases of true influenza? or were they cases of inflammatory catarrh? Although the symptoms of catarrh are common to influenza, it seemed plain to me from the first that the patients were suffering from influenza. The frontal headache, with an amount of debility disproportionate to the other symptoms, and the great digestive disturbance, indicated the epidemic affection. I am borne out, too, by the fact that influenza is admitted to have lately prevailed both in Paris and London. It was reasonable to conclude that a symptom not known to occur in inflammatory catarrh belonged to an epidemic remarkable for the versatility of its phenomena.

In the "Annals of Influenza," compiled by the late Dr. Thompson, I find this statement by Dr. Nelson Scott, in describing the "Influenza as it appeared in the Isle of Man in Spring, 1803:" "Some were afflicted with repeated attacks of epistaxis; and one patient had hæmoptoe to a serious degree, after the epidemic had left him, who had never before been subject to such an ailment. The patient with hæmoptoe had no hereditary claim to phthisis." Again, in Dr. Steeten's Report on the Epidemic of 1836-37, it is stated that "Mr. Smith, of Stroud, mentions that, in two cases occurring in his practice, it (the influenza) produced hæmoptysis to an alarming extent." Dr. Steeten also speaks of the sputa as "occasionally tinged with blood."

These are all the references to the occurrence of hæmoptysis in this disease I have been able to find. It would be very interesting to ascertain whether it has been noticed by many practitioners lately. I have already discovered by inquiries that it has been by some. Thus Dr. Hess informs me that he had a case very similar to Case 4 above. I shall feel much obliged for any communications on the subject.

Amongst the out-patients at the Royal Infirmary for Diseases of the Chest, I have recently observed some cases of profuse epistaxis to have occurred in conjunction with catarrhal symptoms.

Old Burlington-street, April, 1862.

ON A CASE OF DISLOCATION OF THE HEAD OF THE THIGH-BONE INTO THE OBTURATOR FORAMEN, REDUCED WITH THE HEEL IN THE PERINEUM;

AND REMARKS ON THE LIGAMENTUM TERES.

By JOHN ADAMS Esq., F.R.C.S.,

SURGEON TO THE LONDON HOSPITAL.

My attention was directed on the 28th of April to a case which had been just admitted under the following circumstances:—

A middle-aged man was assisting in the unloading of a cart filled with bales of wool, and was standing below to keep the foot passengers out of danger, when a large bale came to the ground from the cart and, falling on his head and neck, forced him to the earth. His body was bent forward at the time of the accident, and his legs were slightly separated. He was found to have sustained some injury to his right hip, and was brought immediately to the hospital.

He was in great agony, much depressed, and complained of pain in the pubic and perineal regions. A very cursory examination sufficed to prove the nature of the accident. The right thigh was separated from the left and somewhat advanced, and as the man lay upon the sofa the attempt to depress the thigh caused great pain. The foot was but slightly everted. On placing the hand beneath the pubis I found the adductors stretched forcibly over a firm unyielding mass—the head of the femur; the nates were completely depressed, the great trochanter having disappeared from view. I did not measure the length of the limb, for I was satisfied at once of the nature of the injury.

The reduction was accomplished under chloroform with the greatest facility in the following manner:—The patient lying flat on his back on a sofa, I directed one of the house-pupils to place himself as if about to reduce a dislocated shoulder of the right side, and to fix his heel in the perineum, defended by a square soft pad; inclining the fulcrum thus formed against the head of the thigh bone, a jack-towel was fixed by a clove-hitch knot above the knee, and by the aid of pulleys the bone was reduced, and the head of the femur slipped at once into the acetabulum. The knees were tied together, and the man was sent to bed.

The simplicity of the proceeding was apparent, and I am sure that even without the aid of pulleys a recent dislocation of this nature may be reduced as readily as a dislocated shoulder. There is no necessity to place the patient under the profound influence of chloroform; it is enough in most cases to influence him so far that his attention is altogether diverted from the injury. I have never witnessed the attempt to reduce a dislocation of the hip-joint of this nature in this manner before; but I dare say it has been done. I once saw my late colleague, Mr. Nathaniel Ward, reduce a dislocation of the thigh on to the dorsum ilii, with the heel in the perineum, in a child, and I was much surprised at the readiness with which the affair was accomplished. The dislocation of the thigh bone into the obturator foramen more closely resembles the dislocation of the humerus into the axilla than any other form of dislocation; and there may be said to be a close analogy between them. A similar method of reducing the former, as is used in the latter, may therefore with propriety be employed, and the result of this case is a proof of its ready and successful application.

The condition of the ligamentum teres in cases of dislocation of the hip can rarely be ascertained; but I am of opinion that