off either by an intercurrent complication, or by the gradual invasion of the tumour, or by the recurrence of symptoms which were only temporarily suspended by ligature.

Before concluding, I will state the results of three new cases of ligature of one lingual artery, with the object of arresting the progress of lingual cancroids.

The first case was that of a man aged 68, who came into M. Demarquay's wards on October 20th, 1874, suffering from a cancer of the tongue, which had attacked all the left half of the organ, but did not pass the median line. There was a deep fœtid and sanious ulcer, bleeding easily; the patient swallowed with difficulty; his speech was much impeded in consequence of the almost complete immobility of the tongue. The submaxillary glands were lumpy. On November 6th, the lingual artery was tied outside the hyoglossus muscle, and the lump of submaxillary glands was removed during the operation. On November 7th, a notable depression of the lingual tumour of the left side was noted. There was less ichorous secretion; speech was more easy, and the dysphagia was diminished; the tongue was not so hard. On November 12th, the ligature came away; from the 12th to the 24th, the patient had a slight increase of disorder. There were redness and hyperæsthesia of the whole of the buccal mucous membrane. All of these symptoms disappeared by degrees. On December 27th, the patient's general condition was more satisfactory; his appetite was good; he swallowed easily, spoke in a comprehensible manner, and the secretions from the part had but little smell. The ulceration had scarcely increased at all. The pains of which the patient complained before the operation had not disappeared.

The second case was that of an old man aged 69. He came in on November 19th, 1874, suffering from a cancroid of the tongue, for which he had undergone an operation. The first time on the 22nd of last May. The right anterior fourth of the tongue was removed; but he had a recurrence of the disease at the end of about five months. On November 13th, he was attacked by violent buccal hæmorrhage, which weakened him much; it only lasted eight minutes, but the quantity of blood lost was very considerable. For about a month he had felt very severe pains in the whole of the right half of the head, of a neuralgic character, returning in paroxsyms. The anterior fourth of the tongue had been removed, the cicatrix was healthy, but the floor of the mouth and the base of the organ at the same side were invaded by a deep ulceration, covered with foul detritus. Its edges were indurated. The submaxillary glands and a submental one were enlarged. Salivation was very profuse, and gave much annoyance to the patient, who spoke with difficulty, and could scarcely swallow anything but liquids. He was ordered a gargle of permanganate of potash, with sulphate of quinine internally. On November 24th, M. Demarquay proposed ligature of the right lingual artery, and succeeded in tying the vessel, notwithstanding the size of the patient's neck and the submaxillary glands. The same evening, a notable reduction of the tumour was observed on the side where the artery had been tied. Salivation was less abundant; the patient felt very well, and had only a little difficulty in swallowing, in consequence of the movements of the subhyoidean region where the ligature (outside the hyoglossus) was applied. On November 28th and the following days, there was no accident. Speech became more easy; the ulcer became cleaner, and even seemed to diminish. On November 30th, the patient had an attack of gout. On December 3rd, the ligature came away. On December 20th, the patient was much better than when he came into the hospital, and went out. The ulcer was clean, the tongue was less indurated; speech and deglutition were easy; there was no more tendency to hæmorrhage; and the general condition was good.

The third case was that of a man aged 62, suffering from a cancroid of the tongue, which invaded both sides of the organ, implicating the base. There were enlarged submaxillary glands on both sides; deglutition and speech were impeded; and there was copious salivation. On December 3rd, ligature of the lingual artery of the right side was performed, and a great reduction of the tumour on that side was noted. The salivary secretion was diminished. There were no accidents on the following days, and less difficulty in speaking and swallowing, though considerable pain was felt during the first thirty-six hours. M. Demarquay wished to perform ligature of the lingual artery on the other side; but the patient left the ward, finding himself sufficiently relieved.

In conclusion, the results obtained in these three cases of unilateral ligature are very satisfactory. Without at all pretending to bring forward this operation as one to be often employed in cases of epithelioma of the tongue, we still think that it is likely to render essential service to patients in the conditions pointed out, and that this treatment should be extended to a greater number of cases than it has hitherto been.

A CASE OF MEDIASTINAL CANCEROUS TUMOUR, LEADING TO OCCLUSION OF THE RIGHT BRONCHUS, AND CONSEQUENT COLLAPSE OF THE RIGHT LUNG, AND CARDIAC DISPLACEMENT.

By I. BURNEY YEO, M.B., M.R.C.P.,
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S. A., AGED 53, a picture-colourer, first came under my observation as an out-patient at the Brompton Hospital on November 11th, 1874. I was at once struck by his appearance. The dusky pallor of his countenance, his emaciation, his breathlessness, which was not of a noisy sort, but what might be called a silent dyspnœa, gave warning of the presence of serious disease. He immediately seated himself in a chair, and appeared reluctant to move, as the smallest attempt at exertion increased his difficulty of breathing. It was also a trouble to him to talk, and it was with some difficulty, therefore, that I obtained from him the following history.

His father was a healthy man, and lived to be 75; but his mother and a sister had died of phthisis, and he had also lost another sister from cancer of the uterus. With the exception of attacks of winter-cough, he had always had good health until about six months ago. He had always been temperate. About twenty years ago, he contracted a chancre, which was followed by an eruption.

His present illness dated from last April. He then had what he was told was an attack of bronchitis. He recovered from this to a certain extent; but, in the beginning of June, he thought he "caught cold again". He had shiverings, and felt pain and "pressure" in the right side. Three days after the shiverings, he took to his bed, and remained there for two months, suffering from difficulty of breathing and cough, with only slight expectoration. He was then told that he was suffering from pleurisy, and that there was fluid in the right pleural cavity. In August, he was better; he was told that the fluid had been absorbed. He got up and went about.

Towards the end of October, he found himself becoming worse again. He suffered much from dyspnœa on the least exertion, and he had a troublesome hard cough. He had been losing flesh for six months. He at this time presented the appearance of a pale emaciated man; pale, as I have said, with a dusky and livid pallor; complaining of great general weakness and distressing dyspnœa on the least exertion. He had a slight cough, with a little muco-purulent expectoration. His pulse was small, compressible, and very rapid—140 to 160 in the minute. Respirations, 32. On stripping him and examining his chest, the first thing that struck me was a remarkable displacement of the heart, which was easily seen and felt beating entirely on the right side of the chest. There was diffused cardiac impulse occupying the right mammary region, and extending downwards to the right side of the ensiform cartilage. But over the whole normal cardiac area on the left side there was clear pulmonary resonance. On inspiration, it was observed that the left side of the chest expanded much more than the right. Over the whole of the right side of the chest, there was dulness on percussion, both anteriorly and posteriorly. The left side, on the other hand, was superresonant in front and behind, this resonance extending beyond the middle line in front and nearly reaching the right margin of the sternum. There was very little diffused inspiratory movement even on the left side of the chest, and it was clear that the left lung was greatly distended and emphysematous. On auscultation, there was no natural respiratory sound to be heard on the right side; a moderately loud rhonchus was occasionally audible at the right base, and a distant, faint, blowing sound with the expiration over the right scapular region. Later on, an indistinct crepitant *râle* was heard in the right supraspinous fossa.

There was very little vocal fremitus either in front or behind on this side, but it was not entirely absent. A rhonchus was also heard at the base of the left lung.

The patient complained of no pain or tenderness anywhere. There was no noisy breathing; no stridor; the voice-sounds, though somewhat feeble, were quite natural. There were no distension of the superficial veins, no œdema, no marked pressure-signs of any kind. On his first application as an out-patient, he declined to be taken into the hospital, as he had, he said, some work to do at home. He attended again on November 21st, when I was unable to be at the hospital, and, therefore, did not see him. But, on December 5th, he came, for the third time, as an out-patient; and, as he found he was losing strength rapidly, and that his symptoms had been in no degree

relieved, he was induced to accept my offer to make him an in-patient in King's College Hospital; and, on December 10th, he was admitted into that institution under my care. On his admission, and as long as he was in the hospital, the physical signs were, and remained, precisely as I have given them above.

After a few days' rest in bed, his symptoms were greatly relieved. His dyspnœa was scarcely observable; his appetite was good; he slept well, and was cheerful, and, save when occasional slight attacks of cough and expectoration brought on an access of dyspnœa, he presented few subjective symptoms of any distinct import.

After, however, he had been in the hospital about ten days, the cold weather, which had been for a long time severe, became intense; this seemed to depress him physically; he became somewhat confused and incoherent in his manner, and, on the 23rd, somewhat unexpectedly, he died from exhaustion, after only thirteen days in hospital. There was no aggravation whatever of the chest-symptoms; but he had not vital energy enough to resist the continued depressing influences of protracted cold. A case of thoracic aneurism in the very next bed to this patient died a few days afterwards in precisely the same manner, not directly from the effects of the aneurism, but from exhaustion induced, to a great extent, by the depressing influence of cold.

We did not feel quite sure what we should find on *post mortem* examination. In its general aspect, the case resembled one of malignant tumour within the thorax; but, save the dyspnœa, there were none of those pressure-signs which generally accompany such disease; and, with rest in bed, the dyspnœa disappeared. He had no pain, no orthopnœa, no anxiety. He ate and drank and slept well. There was very little cough; indeed, there was an almost entire absence of subjective symptoms. We had a history of a previous attack or attacks of pleurisy, and we were assured that there had been an effusion into the right pleura, and subsequent absorption of the fluid. There was clearly considerable contraction of the right lung, sufficient to cause the heart to be displaced from the left to the right side of the chest; there was also considerable compensatory expansion of the left lung. But there was no noticeable retraction of the left side. I have seen the heart displaced in this way, drawn over to the right side, from the contraction of a large cavity in the upper part of the right lung; but, in such a case, there is also usually very marked flattening or depression of the chest-wall opposite the seat of the cavity; or the heart may be pushed over to the right by a large effusion of fluid into the left pleura, and may contract adhesions to the right chest-wall, and so be permanently fixed there. But this was certainly not the case in the instance before us; for the left side was clearly occupied by a greatly distended and very emphysematous lung.

In the next place, the question arose, Could the symptoms and physical signs observed in this case be satisfactorily accounted for by supposing that there had been an effusion of fluid into the right pleural cavity; that this had been slowly absorbed; and that the lung, having been prevented from expanding by bands of lymph, and the chest-walls prevented by rigidity from retracting, the left lung had slowly dilated, and pushed the heart over to the right side? The dyspnœa on exertion, which was the chief subjective symptom, would thus be accounted for by the contraction and compression of the right lung, the highly emphysematous distension of the left lung, and the cardiac displacement. The absence of all pain and tenderness, of all pressure-signs, such as dilated veins, stridor, dysphagia, aphonia, etc., and the disappearance of the dyspnœa with rest in bed—all these circumstances, together with the stationary condition of the physical signs, tended to obscure the nature of the case, although they in no way diminished its clinical interest. On the other hand, the evident cachexia, the emaciation, the peculiar dingy pallor of the countenance, pointed to the probable existence of malignant disease within the chest.

Post mortem examination revealed the existence of a tumour about the size of a large orange, situated in the posterior and middle mediastinum, pushing down the base of the heart. It was of a whitish colour, and cut with a moderately firm section. It enclosed in its substance many black bronchial glands. A small process of this tumour had grown into the right bronchus, so as to almost completely occlude it. In the apex of the right lung, there were three or four rounded masses, the largest of the size of a filbert, moderately firm, and whitish in colour, and resembling in appearance the larger tumour. The right lung was firmly adherent to the chest-wall throughout, and the pleuritic adhesions were so strong, that the lung could only be removed by lacerating its substance. The lung-substance was crepitant at the apex, but the middle and lower lobes were firm and indurated from complete collapse. The left lung was markedly emphysematous. The heart was found to lie horizontally, the base turned quite to the right side, and on a level with the apex.

On microscopical examination, the tumour presented the characters of medullary cancer; the fibrous tissue was more abundant than usual, but the cells were well marked, and contained, for the most part, several large nuclei and sometimes nucleoli.

NASOPHARYNGEAL POLYPUS: HYPERTROPHY OF THE MUCOUS MEMBRANE: TRACHEOTOMY: REMOVAL OF SUPERIOR MAXILLARY BONE: DEATH.

By ARTHUR S. UNDERHILL, M.B.

A BOY, aged 14, was brought to my surgery in the early part of last month, suffering from difficulty of swallowing and great difficulty of breathing, particularly when in the recumbent position. He had had occasional attacks of hæmorrhage from the nose. The disease commenced eight months ago with an inability to blow down the right nostril. He had gradually grown thinner; the hæmorrhage, which was sometimes very considerable, had greatly debilitated him; in fact, so weak was he that he was unable to walk any distance, or even to stand for any length of time. On examination, the soft palate on the right side was seen to be bulging considerably forwards and downwards, so as entirely to preclude the view of the pharynx; the bulging was tense, with no fluctuation. On attempting to pass the finger down the pharynx and to hook it over the soft palate, a number of small oyster-like bodies were felt entirely occluding the posterior nares and much contracting the cavity of the pharynx; they seemed to be sessile and closely packed together; no pain was felt after the manipulation, but there was very considerable hæmorrhage. In consultation with my father, I decided to perform tracheotomy as a first step, as the patient's condition was not such as to warrant a very severe operation, and it was imperative that his breathing should be relieved. The night before the operation, so great was the dyspnœa that his attendants had to constantly change his position and shake him, as they were afraid that his breathing would entirely cease.

After tracheotomy, the relief was immense. He slept well, and became very lively; but the polypi increased rapidly in size, so much so, that it became a matter of difficulty to swallow even liquids. I accordingly, as a *dernier ressort*, excised the right superior maxillary bone fifteen days after the first operation. This I accomplished with less hæmorrhage than I anticipated. The bones, being young and soft, separated readily, thus enabling the operation to be rapidly performed. We found the mucous membrane to be everywhere very considerably thickened, and a number of small polypi varying in size from a pea to a moderately sized oyster studding everywhere the mucous membrane as far down as the finger could reach. Some of these were torn away with the finger-nail; and others lower down were removed with the *écraseur*. The operation was necessarily a bloody one, and the actual cautery was necessary. The boy temporarily rallied, but gradually sank seven hours after the operation.

I wish to suggest that, in future major operations about the mouth and air-passages, tracheotomy should be performed as a first step. In this case, I was compelled to do it. Tracheotomy (at all events, before adolescence) is an easy and comparatively safe operation; and chloroform can so safely and so effectually be administered through the trachea-tube without hampering the operator or his assistants, and the patient has a free opening to breathe through, not being choked, as they usually are, by the blood which necessarily trickles down the air-passages, and when coughed up sputters over the operator. Having a tube in the trachea also allows a sponge to be placed at the back of the pharynx, and so prevents any blood from entering the œsophagus or trachea. I should recommend that a tube be used without a fenestrum, so that, if it fit the trachea well, no blood can possibly enter the trachea through it.

MATERNAL IMPRESSIONS.—*A propos* of recent papers in the JOURNAL on the subject of maternal impressions, the following may be interesting. In a *Discourse delivered at Montpellier*, and published in London in the year 1698, Sir Kenelm Digby refers to the dread of a drawn sword which was manifested by James the First, and attributes it to the fright received by Mary in consequence of the murder of Rizzio in her presence when she was pregnant. Sir Kenelm was knighted by James; on that occasion, he says, the King could not look upon his sword, and adds, "he had almost thrust the point into my eye had not the Duke of Buckingham guided his hand aright".

GEORGE F. ELLIOTT, M.D.