mediately, she was seized with a recurrence of her old formidable symptoms, gasping for breath, her pulse 140 and upwards, rapid respirations, blueness of the nails and lips. This fight for life continued for hours, when she fell asleep apparently from exhaustion, and gradually the distress subsided; and the leg, which had been so swollen, rapidly returned to nearly its normal dimensions.

At that time, there was no repetition of the evil; but, fourteen months afterwards, the patient, who had continued to suffer from her pelvic troubles, awoke from sleep with a third recurrence. This attack, which was sufficiently alarming, but not so severe as the former, lasted for about eighteen hours; and, at a venture, I tried a hypodermic injection of morphia, which appeared decidedly beneficial. Gradually the distress subsided, and there was never another attack.

To summarise: in the case of systemic arterial embolism, we had immediate cessation of the pulse in both brachial and radial arteries, without any orthopnea, distress of breathing or lividity, but tendency to death by syncope and, later on, hemiplegia. In the case of pulmonary embolism, we had urgent dyspnea and orthopnea, the thirst for air of Trousseau, rapid pulse, lividity, and tendency to death by asphyxia.

In conclusion, I would add that, although but too frequently the physician has to deplore that his practice is a "meditation upon death", still recoveries from such grave cases as I have narrated call upon us to persevere and take courage.

NOTES OF A CASE OF RHEUMATIC PERICARDITIS, WITH TETANY.

By W. BEATTIE-SMITH, F.R.C.S.E.,
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THE patient who forms the subject of these "Notes" exhibits features of more than ordinary interest, inasmuch as the affection termed tetany is one not often met with, or at least one which is seldom noted by authors. So far as I can make out, no English writer has described this interesting condition of spasms, almost idiopathic in nature. The subject has been treated of by French authors under varying titles; at one time being called "intermittent tetanus," and at others, "idiopathic muscular spasm", "contraction of the extremities", and "idiopathic paralysis with contraction". Trousseau, one of the chief writers hitherto on this point, was at first in the habit of calling it "rheumatic contraction of nerves", but soon gave up that description for one first applied by Corvisart in 1852—viz., *tetany*.

The first mention of the disease in the many authors at my command is that by Dance, in 1831, in the shape of a memoir, entitled "Observations sur une Espèce de Tétanos Intermittent," to be found in the *Archives Générales de Médecine* of that year. It would appear from those writers, particularly Trousseau, that the puerperal and menstrual periods, as also the conditions diarrhoea and rheumatism, were states favourable to the accession of those interesting muscular spasms, though nothing definite is known of the pathology.

With a view to the eliciting of further information, through the medium of the Association's JOURNAL, on this most interesting complication of commonly recurring conditions, I shall detail a few facts ascertained by me in my case, which has been under careful notice since Nov. 28th, 1878.

The patient, E. H., aged 13 years, residing at Stockton-on-Tees, first came under my notice on the above-mentioned date, suffering from pericarditis, with effusion and aortic insufficiency. The symptoms were: pains over the cardiac region, extending over the left shoulder to the scapula and down arm to the finger-tips; tumultuous heart's action, irregular pulse, dyspnoea, inability to lie on the left side; anxious expression, and tendency to syncope. On auscultation, a distinct to-and-fro friction-murmur was to be heard all over the cardiac area; and on percussion, which was most painful, dullness was found to exist over an enlarged area, the extent of which, however, was not ascertained, owing to the agony caused by manipulation of the left chest. The previous history tells us that the little patient had rheumatic fever two years and six months ago, with which she was confined to bed for five weeks, and on recovery her friends were informed by their then medical attendant that "her heart was affected." Four days before I was called in, she had pains resembling subacute rheumatism from the description given me; the reason I was sent for being the presence of intense pain over the cardiac region, and the accession of spasmodic contractions of thumb and fingers of the left hand on the palm. Not knowing what to make of those spasms, I merely treated the case as if they did not exist; that is, at the first; as shortly I had no doubt in my own mind as to the nature of the contractions, attributing them, as I did, to the condition

termed tetany, carefully eliminating any symptoms of hysteria and epilepsy. The progress of these spasms was most interesting; the thumb and fingers of the left hand being first affected, then those of the right similarly, the thumbs being forcibly adducted, and the fingers tightly overlapping them. Next, the toes of the right, and then of the left foot were flexed, and the heels somewhat retracted; and on December 9th the condition was, the fingers and thumbs flexed on the palms, the hands on the forearms, and these on the upper arms; the toes flexed, the heels retracted, the legs flexed on the thighs, and a semi-lateral decubitus to the right. Several attacks occurred to-day, lasting for about ten minutes each time, the contractions being forcibly relaxed.

This state of matters obtained off and on, with varying intermissions as regards time, up to January 20th, when the spasms ceased until the 31st, at which time she had three slight attacks, but without contractions. From this time up to February 23rd she had several minor spasms, but on this day she was very ill, having had a series of spasms during her sleep, though being only partially roused. Blueness was observable round the mouth, and extending from the *alæ nasi* over the cheeks; there was intense cardiac oppression. Up to this time, she has been much better, though not clear of spasms.

The treatment throughout was applied in accordance with the rheumatic condition which obtained, with its consequent cardiac complications and albuminuria, with the result that the patient is now able to do some light household work and take exercise in the open air. I think there can be no doubt but that the rheumatic affection in this instance was the cause of the spasms, there being nothing else to be found at all likely to account for them. There have been no attempts at menstruation.

May 30th, 1880. Her condition is much the same generally. There is a well-marked mitral systolic murmur.

ON APOPLEXY OF THE LUNG FROM CARDIAC DISEASE.

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I SEND the following cases for publication, as they may be interesting to the readers of the JOURNAL.

The first is a case of bronchitis, with apoplexy of the lung, occurring in consequence of a fatty and much dilated condition of the heart; the other is an example of the same accident arising from mitral-valve disease.

I was sent for by A. B., aged 43, by trade a roller, on June 3rd, 1874. He was a stout well-built man, who had evidently indulged freely in eating and drinking all his life. He had never ailed much before, except from slight attacks of hepatic derangement brought on by drinking too heavily. He was now suffering from great difficulty of breathing and severe cough. He complained of a sense of tightness across his chest. The expectoration was frequent and great in quantity, principally of a mucous character; the pulse was 95 per minute, very weak, almost imperceptible; the tongue was foul; his appetite poor, and bowels costive. The urine was high, of specific gravity 1021, acid, small in quantity; no albumen. The liver was slightly enlarged. There were no head-symptoms, but slight general anasarca. Bronchial *râles* could be heard all over the chest; there was no dullness. The sounds of the heart were hardly audible; its impulse was exceedingly weak. The arcus senilis was evident. On June 8th, his cough was much worse, and he now brought up a large quantity of blood. On examination, I found the lower third of the right lung quite dull in front; and on the following day the lower two-thirds was dull, and respiration was quite bronchial. Bronchial *râles* could be heard as before in the upper third and the whole of the left lung. The pulse was 85, exceedingly weak. The heart-sounds were hardly to be heard, and the impulse was scarcely perceptible. Respiration was difficult and frequent. The skin was moist. He continued to cough up blood every day, and to become weaker. On June 10th, his pulse rose to 120. Breathing became more difficult. The skin became dry; its temperature rose to 103°. He still continued to cough up blood, which was now accompanied by rusty sputum. On June 13th, he died.

On making a *post mortem* examination, I found the heart very much dilated; the walls were exceedingly thick, and the whole organ had undergone fatty degeneration. There was not any valvular disease. The left lung was comparatively healthy, but congested and slightly cedematous. The right lung was large, of a dark colour generally. The upper third was very cedematous. Certain portions of the middle and lower lobes were quite solid and dark, perfectly airless, and blood could be scraped from the surface. In one part of the lower lobe could be seen a portion of hepatised lung. The localised pneumonia

was no doubt produced by the clot acting as a foreign body. There was not a trace of tubercular or other deposit to be found in either lung. There was general anasarca.

On February 15th, 1872, I attended a young woman aged 23, who had suffered, when about fifteen years of age, from a severe attack of rheumatic fever with endocarditis. This had left behind chronic mitral regurgitant disease, in consequence of which she had also suffered ever since from chronic bronchitis, which was always worse in winter. She now had a serious attack of hæmoptysis, brought on by nursing a baby. The cough was severe. The quantity of blood brought up was great. The pulse was exceedingly weak, about 95 per minute. There was a loud systolic mitral murmur to be heard, and the lower part of the left lung was dull. The cough, difficulty of breathing, and expectoration of blood continued, and on the nineteenth day the patient died.

On examining the heart, both tongues of the mitral valve were thickened and irregular. The left heart was dilated and hypertrophied. Both lungs were dark and slightly oedematous; the left lower lobe was solid, in some parts almost black; the tubes were filled with blood, and pieces of the lung sank in water. The other organs were healthy.

The first patient suffered from bronchitis; but this was aggravated by the much dilated, flabby, and degenerated heart, which could not with sufficient force pump the blood onward from the left ventricle, and thereby produced engorgement of both lungs, the blood-vessels of which had no doubt undergone fatty changes, and were ready at any time, if the patient underwent severe exertion, to give way. Again, in the lower part of the right lung, a clot acted as a foreign body, and set up inflammation all around. The commencement of inflammatory action was no doubt coincident with the sudden increase of the heat and rising of the pulse. Here we see the necessity there is for us, after lung-hæmorrhage, carefully to watch the pulse and temperature daily, which will surely indicate the setting up of inflammatory action, the products of which, combined with the clot, are apt, by mutual pressure, ultimately to end in destructive caseation and formation of a cavity.

In the second case, the hæmorrhage was no doubt predisposed to, not by a weakened state of the heart, but by the leakage through the mitral opening. The sudden hæmorrhage was immediately produced by severe exertion; but the tendency thereto was present before. The pulmonary, unlike other veins, being destitute of valves, readily permit of regurgitation into the lung in cases of mitral-valve disease; hence the engorgement is chronic; and the walls of the blood-vessels, owing to the pressure upon them produced by the within contained blood, become weak and more apt to give way when there is the slightest exertion undergone by the patient.

THERAPEUTIC NOTES, WITH ESPECIAL REFERENCE TO THE TREATMENT OF PHTHISIS BY CHLORIDE OF CALCIUM.*

By JAMES SAWYER, M.D.Lond., M.R.C.P.,

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A GREAT deal of the art of therapeutics as it is practised amongst us is unwritten. We are sometimes shy about telling what we do for our patients, because we have not courage to brave the risk of being thought common-place. Useful as are our meetings, I believe their profit would be much increased if members would more frequently bring forward and compare their therapeutic experiences. Those of us who are in earnest and who believe that therapeutic art—an art which includes, but is much more than, the administration of combinations of the materia medica—can powerfully modify morbid processes and can powerfully aid the *vis medicatrix naturæ*, and who think of what we do, have done, have not done, and shall do for our patients, must be constantly arriving at conclusions, as the result of observation in our own practices, which modify, confirm, correct, extend or suggest extensions of what I may call our therapeutic conduct. These conclusions may not be able to bear the test of an exhaustive logical scrutiny; perhaps they are no less true, perhaps they are not more true, than John Wesley's belief that sulphur did his rheumatism good (Wesley was probably right in his opinion, notwithstanding the ridicule of Mill, and that grand logician's brilliant exposition of the strict logical limitations of a therapeutic inference); but if these conclusions, which we must be constantly forming for ourselves, are accepted by each of us as reasonable

and responsible men as guides to our therapeutic action, they are as worthy of communication to our brethren, and I believe they are as interesting to them as the inspection of a rare case with striking objective manifestations, the demonstration of a pathological specimen, the description of a new operation, the exhibition of an ingenious instrument, or an elaboration of surgical statistics.

Have we a remedy for phthisis? We now know that the term chronic pulmonary phthisis includes a variety of pathological conditions and a variety of textural lesions in the lungs which have long been recognised as distinct, which recent research has done much to unravel, and about which we may still expect to learn more. We know the differing clinical and pathological courses of tubercular phthisis, unresolved lobar pneumonia, chronic catarrhal lobular pneumonia, and pulmonary cirrhosis. All these are included in the generic name phthisis. When I say have we a remedy for phthisis? I mean, have we a remedy for this allied group of conditions, due to varying pathological changes, but marked in common by progressive wasting of the body, by progressing asthenia, by progressing diminution of respiratory capacity, and by fever of a hectic type. Every case of phthisis requires special study, and can be treated by no rule-of-thumb practice because it is phthisis. In one case anæmia is prominent and calls for iron, perhaps for arsenic; in another, continued but small hæmoptysis calls for ergot or hamamelis; in another, a racking and frequent cough calls for opium, morphia, or codeia; in another, dyspepsia calls for alkalies or acids, or bitters, or pepsine; in another, nervous unrest calls for bromides; in another, laryngeal troubles call for special local medication; in another, we have to aim at controlling excessive sweating or checking an exhausting diarrhoea. Apart from these and other particulars, I suppose we are all agreed that cod-liver oil, given alone, or variously combined with other agents which tend to promote its assimilation, as with ether, as suggested by Dr. Foster, stands at the head of remedies calculated to promote the general nutrition of the phthisical. Have we any other general remedy? For a long time I trusted to syrup of the iodide of iron. This I gave up for a mixture of hypophosphites and iron—five grains of hypophosphite of lime, ten grains of hypophosphite of soda, and fifteen minims of syrup of the phosphate of iron, for a dose. This is a good combination, and I still use it. But chloride of calcium is my favourite drug. I have used it for some years in hospital and private practice, and I believe with great advantage. Perhaps you will say, Do you give it alone? I do not. I give it with cod-liver oil, or with cod-liver oil emulsion, or with morphia, or with ergot; but my general impression is, *quantum valet*, that I get better results with chloride of calcium with these combinations than I do with anything else in the same combinations. My attention was called to the value of chloride of calcium in phthisis by a paper in one of our medical journals, wherein it was stated that the drug was much used by the late Dr. Warburton Begbie. Scarcely mentioned, if noticed at all, in books on drugs, chloride of calcium has an old repute for the cure of strumous glandular swellings. In phthisis, I give ten grains dissolved in a drachm of water and mixed with a drachm of glycerine, in a wine-glassful of milk twice daily, immediately after meals. I think it tends to check night-sweats, to cause increase of weight, and to dry up pulmonary lesions. Of course I do not maintain it does these things in all cases. What I have stated are general conclusions, open, I am aware, to objection on the ground of their insufficient logical basis, but conclusions which have been and are for me grounds of therapeutic conduct. In prescribing chloride of calcium, we must be careful to write the name of the drug distinctly and in full, in order to avoid an error from which one of my patients suffered, namely, the substitution of "chloride of lime".

ON CHAIR-SUPPORTS IN SPINAL CURVATURES.*

By CHARLES STEELE, F.R.C.S.,

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WHEN Dr. Sayre brought before the profession in England his method of treating spinal curvatures, I was strongly impressed with the value of the principles which he enunciated. My appreciation of the sound and practical character of the system has been deepened by a careful study of his valuable works, and also by the success which, in several cases in my practice, has attended the adoption of his plan of first setting (if I may use the term) the diseased or displaced bones, and then keeping them in place with closely fitting and firm splints, which secures to the invalid the power of maintaining the erect position, and the remedial benefits of exercise and fresh air.

The plaster-of-Paris bandages, which alone were available for this

* Abstract of a paper read before the Birmingham and Midland Counties Branch.

* Read in the Section of Surgery at the Annual Meeting of the British Medical Association in Cork, August 1879.