ment of gas-lights in sleeping apartments, or even in sitting-rooms, unless proper appliances be in use for carrying off the products of combustion and for admitting fresh supplies of pure air, produces an atmosphere in some degree analogous to that which was the cause of illness in the painter, M—. These are things of no small consequence to be borne in recollection in private practice. It is still common for bronchitic persons to shut themselves up in close, hot rooms, and breathe impure, because imperfectly renewed, air, in the idea of thereby avoiding draughts; although, by so doing, they in fact aggravate their ailments and defer their cure. Doubtless there are cases in which we are compelled to keep our patients for a time in an artificial temperature; but whilst the air of their apartments should be warm, it should never be allowed to become either dry or close, both of which conditions tend to increase any existing bronchial irritation. Even the simple device of keeping a kettle of boiling water on the fire, with a spout long enough to throw a constant jet of steam into the room, will suffice to moisten the air, and, with proper contrivances of screens or curtains to ward off draughts, free ventilation may always be obtained without danger to the most susceptible patient. By far the greater number of bronchitic patients, however, actually do better when not kept in rooms at a high temperature, and are, moreover, much more likely to make a good recovery, inasmuch as they sustain less injury to their general health, and are able to go about earlier, and with less risk of taking cold from any slight exposure, than those who have been more confined. It is not so much a warm atmosphere that is needed by bronchitic persons as ample protection from chilling of the surface, and this may be secured by suitable clothing. In fact, as a rule, I have found that, other things being equal, chronic bronchitis is slower in its progress, and less speedily affects the general health, in persons whose duties take them much out of doors than in those who from their in-door occupations would generally be presumed to be less exposed to causes of taking cold, and of thereby inducing accessions of their complaint.

I have left myself but a brief space for remarks on treatment, and must therefore restrict myself for to-day to a few observations on the therapeutic agents used in the cases I have read to you. When patients come under treatment with a recent accession of catarrh engrafted upon a chronic bronchial affection, I find it best to act at once upon the skin, to promote expectoration, and to soothe the irritated membrane. For these purposes, if the pulse be of good volume, and the patient's strength not impaired, I usually in this stage of the disease prescribe much as I did for the painter, M—, on his readmission. Sometimes, however, the antimonial wine is too depressing, or produces distressing nausea when combined with the ipecacuanha, and then, according to circumstances, I omit one or other of these medicines; but, at any rate, as soon as free secretion from the bronchial mucous membrane is established and the skin becomes moist, I omit the antimony.

Somewhat later in the progress of such cases, and from the very beginning of the less acute accessions which often occur in persons like the patient, F—, who have long been subject to chronic bronchitis, I find the more stimulating expectorants, such as squills, the most effectual. But in almost all cases of chronic bronchitis a time arrives when expectorants cease to be useful. More or less expectoration indeed continues; but the secretion is of the nature of a flux from the bronchial membrane rather than the result of irritation. The treatment now required is of a tonic character, and zinc, iron, or quinine, will all of them at times be most useful; but I have long been accustomed to prescribe with great advantage the mineral acids, especially nitro-hydrochloric acid, in combination with a vegetable bitter, retaining frequently the ipecacuanha and hyoseyamus. In old chronic cases attended by very copious expectoration, such balsamic medicines as ammoniacum, copaiba, Canada balsam, and benzoin, are often of great service; but as they are at the same time apt to disagree with the stomach, and as the digestive powers in such cases are often very feeble, I have for the last eight or nine years been using, in their stead, the tincture of larch, which has no such tendency, and which I have found at least equally serviceable in regard to the bronchial affection. Its effect is not only to lessen the expectoration, and with it the cough and dyspnoea, but also apparently to restore the debilitated membrane to a more healthy tone, and render patients less liable to catarrhal attacks at every change of weather or season.

I must not omit to explain a remark which I made with reference to the application of a blister to the sternum in M—'s case. I assigned as my justification that the case was one of primary bronchitis, and that the urine was per-

fectly normal, and I take this opportunity of cautioning you against the indiscriminate use of blisters in bronchitis. Although they may sometimes be employed to great advantage in the chronic form of the disease, they must be regarded as unsafe remedies unless the kidneys be perfectly healthy. In gouty persons, or whenever we have the slightest reason to suspect any tendency to renal disease, the use of blisters is hazardous, on account of their liability to produce irritation of the urinary organs. Probably this objection may apply less strongly to the use of liquor vesicans or of blistering-paper than to the old-fashioned blister; but it is more prudent in doubtful cases to abstain altogether from these modes of counter-irritation.

Useful as medicinal agents undoubtedly are in allaying or curing attacks of bronchitis, I need not tell you that whenever the bronchial affection is even partially referable to an existing external cause, no permanent good can be effected without the removal of that cause. Among the working classes it is often impossible to accomplish a change of circumstances, though I have seen a few such cases, in which the patients recovered surprisingly; but among the higher classes of patients, whose habits can be more easily modified whenever they become convinced of the necessity, much may be accomplished in that direction. I say whenever the bronchial affection is even partially referable to an external cause, because I must remind you that, as the facts brought out by my analysis have shown, cases of quite simple primary bronchitis, such as I have brought before you to-day, are comparatively rare. Even amongst our hospital patients external causes in a large majority of cases only develop or aggravate hereditary or constitutional tendencies to bronchial disease, and this naturally obtains still more among the upper classes, who are exposed to those causes only in slighter degrees.

My next lecture will be devoted to giving you examples of the much larger class of cases which I have already designated as cases of secondary bronchitis.

NOTES

ON

ACUPRESSURE.

By SIR JAMES Y. SIMPSON, BART., M.D.,

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AFTER Ambrose Paré—three hundred years ago—proposed to surgeons that they should “bid eternally adieu to all hot irons and cauteries” in arresting the hæmorrhage attendant upon surgical wounds and operations, and use silken ligatures to stem the flow of blood from the cut arteries, his suggestion met with little or no support during his own age or for many long years subsequently. During the sixteenth and seventeenth centuries, surgeons still persevered in arresting the flow of blood after amputation and other wounds, by scorching over their raw and bleeding surfaces with red-hot irons, or by applying strong potential caustics. Dionis, writing a century and a half after the time of Paré, tells us that in the Hôtel Dieu of Paris, in the chief hospital of the very city in which Paré himself had lived and practised, caustics were still in general use for the arrestment of hæmorrhage after amputations. And in the middle of last century, Mr. Sharp, of London, states, in his “Critical Inquiry into the Present State of Surgery in England,” that some English operators still employed the ligature sparingly, from their “horrid apprehension of compressing the nerves.” Speaking of the slow progress of the introduction of the ligature of arteries into England, the same author observes that it only “by degrees crept into practice” in this country.

Knowing these painful and striking facts in the history of the deligation of arteries, I had little or no hope, when I ventured to suggest the substitution of the needle for the ligature some seven years ago, that I should live to witness the introduction of acupressure into general surgical practice anywhere, though I felt sure that if it was honestly adopted and carefully applied it would be found greatly superior in many respects to deligation. I feel, therefore, some degree of pride in being allowed to forward to the columns of THE LANCET the following extract from a letter which I received a few days ago from Dr. Keith, the well-known surgeon and celebrated litho-

tomist of Aberdeen, showing, with other facts, that acupressure is now *established* as the rule of practice in one of our three Scottish medical schools. Before citing the letter allow me to observe that the accomplished Professor of Surgery in the University of Aberdeen, Professor Pirrie, and Dr. Keith, have lately published a most excellent practical inquiry into the whole subject of Acupressure, with full details of their cases. The cases referred to in the following incidental letter from Dr. Keith have occurred since the book was printed. "Acupressure," writes Dr. Keith, "here is *triumphant*—nothing else being dreamt of,—and, I may say, in daily use. Within the last fourteen days I have employed it in the following operations:—In an amputation of the forearm acupressure by first mode at the elbow commanded the humeral before bifurcation; and the wound healed by first intention. I removed a large recurrent fibroid tumour for the third time in ten years. Deep dissection brought me in contact with the external carotid artery. And what of that? It was looped by the sixth mode in three seconds; and the case has gone on to a wish, the wound filling up with healthy granulations, as all the integument being adherent and discoloured was intentionally removed, with a mass like one's fist. On Wednesday last I amputated a thigh. Three vessels by your fourth mode, and three by the sixth mode, were secured. On Monday of this week I amputated two thighs. In one, four vessels required acupressure; in the other, six. The fourth and sixth modes,* were used in about equal proportions. The speed with which the vessels were closed in each case hindered the loss of blood so entirely that the sand-box only showed a spot of blood in its centre."

Dr. Keith's letter attests the small quantity of blood that is lost when acupressure is properly used. All experience proves that it is as safe and good a primary hæmostatic agent, at least, as deligation. But it has been objected that it might lead to *secondary* hæmorrhage when the needles were withdrawn. On this point, Dr. Keith, in the treatise referred to (p. 188), observes, in relation to his cases: "All have been alike successful. In not one instance have I had hæmorrhage at or after the operation; the removal of the pin or needle or wire loop has never in any one case occasioned hæmorrhage. A drop or two of blood may have come in one or two instances from an abraded granulation, but that is all I have ever seen. The period, on the average, which I think sufficient for the acupressure to continue is forty-eight hours, though I feel certain a shorter period would suffice."

"The confidence of the Aberdeen surgeons," says Dr. Keith, "is now so firmly established in acupressure that its use is the rule by the hospital staff" (p. 189). The three chief operative surgeons to the Aberdeen Hospital, Drs. Pirrie, Keith, and Fiddes, all now employ the needle in preference to the ligature. My friend, Dr. Kerr, the fourth or remaining surgeon, I had the pleasure of meeting some time ago at a consultation in Aberdeen, and he ingenuously and frankly told me that—though he had no objections to acupressure—he was too old to adopt such a revolution in practice. He added that, though he did not use acupressure, it had, shortly before my visit, been the means of saving a patient of his in secondary hæmorrhage after amputation. The amputation was one of the thigh, and hæmorrhage had supervened some two weeks or more after the operation, and after the ligatures were separated. It was a case, he thought, where, to stun the hæmorrhage, it would have been necessary to cut down and tie the femoral artery nearer the groin than the site of the amputation. But Dr. Fiddes, who saw the patient before Dr. Kerr arrived, stunned altogether the hæmorrhage by using a mode of acupressure to the femoral artery, and the patient recovered well.

The great pathological and practical advantages which acupressure possesses over deligation have always appeared to

me to be simple and decided. When an artery is closed by a needle, or by any other form of temporary metallic compression, the walls of the arterial tube are brought and held together by a material which does not tear and irritate like thread or silk, and that can be withdrawn in a day or two, at the will of the operator, leaving no extraneous body whatever in the wound to prevent its speedy and complete healing. On the contrary, when deligation is employed the two middle coats of the artery are lacerated and its external coat strangulated. This strangulation leads on inevitably to ulceration or molecular destruction of the external coat at the constricted part, and causes mortification of the artery at the tied point, and usually also below it. The mortified point of the vessel requires to be eliminated and thrown off by ulceration and suppuration, so that there are as many dead decomposing sloughs in each wound, and as many points, however minute, of ulceration and suppuration, as there are arteries ligatured in the wound. Besides, the ligature itself, if of silk or hemp, rapidly imbibes animal fluids, which speedily decompose, and, like so many setons, irritate the surrounding tissues. Hence arises the difficulty, or indeed the impossibility, of wounds containing a series of ligatured arteries ever uniting completely by the first intention; for such wounds are in much the same condition as if minute pieces of dead flesh had been systematically affixed to their sides and walls. But other dangers follow. No surgeon would deliberately leave a patient after the shock of amputation in the neighbourhood of a sewer or where decomposing animal effluvia would be inhaled. But a wound containing a series of septic sloughs places the patient in a dangerous hygienic condition; for morbid septic matters can be imbibed by the open and absorbing surfaces of wounds, as well as inhaled by the lungs. "A poison," sagaciously remarked the late Mr. Travers, "admitted by a wound or raw surface, and a poison admitted by the lungs, are equally excitants of a specific constitutional irritation."

Professor Pirrie, in a series of most important observations and cases, maintains (p. 137) that acupressure "is not only the *easiest* of application, but the *quickest* method yet devised for arresting bleeding;" and a pupil of Dr. Pirrie's, Dr. Will, last week informed me that the rapidity with which Dr. Pirrie secures the open vessels after amputation &c. by acupressure is "something wonderful," and the movements of his fingers cannot be easily followed by the eyes of the attendants. In his—the largest—portion of the conjoint treatise, Professor Pirrie has described the *results* of acupressure, which are more important than its mere facility and rapidity. He states: "The use of the ligature is attended with an insuperable obstacle to obtaining perfect examples either of immediate union or of union by primary adhesion without the formation of some pus. I have never allowed myself to call any case a perfect example of either of these two methods of healing where a single drop of pus was seen. Neither of these two methods of healing, in this sense, can be perfect in any case where the ligature is used. The immediate effects of the ligature—the changes by which its removal is rendered possible, and its presence acting as a seton in the wound—render more or less suppuration at the points of deligation and in the tracks of the ligatures inevitable. I never saw, in the experience of any surgeon or in my own, where the ligature was used, a perfect example of either of the two desirable methods of healing without any suppuration. I believe such a case never was and never will be seen."—p. 138.

We see in this paragraph how strict Professor Pirrie's definition of union by the first intention is, he considering no case a perfect example of it where "a single drop of pus" was observable. Yet in the course of his work he has described above a dozen cases of large surgical wounds, consisting of amputation, excision of the mamma, testicle, &c., where perfect and entire union by the first intention was obtained under acupressure, metallic sutures, complete rest of the wounded part, and the avoidance of all dressings. Could all the hospitals of Great Britain where the ligature is employed, if classed together, furnish within the same period as great a number of cases of large operative wounds healed entirely by the first intention, and without the appearance of "a single drop of pus," as the hospital of Aberdeen? Dr. Davidson, the very able and zealous medical missionary to Madagascar, and surgeon to the royal court of that kingdom, is at present on a brief visit to this country. To-day he kindly furnished me with the following statement with regard to his experience of acupressure at Antananarivo, and under circumstances where, it is to be remembered, he had no educated professional assistant to aid him in his operations. I have myself been told by more than one English hospital sur-

* These numerical references apply to excellent descriptions and plates of the different methods of performing acupressure given in the treatise of Drs. Pirrie and Keith. In their practice they do not notice one method which I have often employed to close minor vessels, and which I have seen my friend Dr. Heron Watson, surgeon to the Edinburgh Royal Infirmary and to Chalmers' Hospital, use. It consists in transfixing with a pin or needle one or two lines of the soft tissue by the side of the bleeding artery, the pin being laid nearly flat in doing so, and with its head towards the bottom of the wound. The head of the pin is then raised up till it is at right angles to the surface of the wound, and then further turned over till the head comes to the outer edge of the wound, and its point is turned to the bottom of the wound. It is easily fixed in this new position by being thrust forward a few lines into the tissues beyond. In its movement the head of the pin is thus turned round half a circle, and in doing so closes the bleeding orifice and overlaps it with a small quantity of neighbouring tissue. This kind of "over-stitch" is one of the simplest and most expeditious modes of acupressure for smaller vessels. But further practice may point out many other modes of simplifying the application of the needle.

see his "Inquiry concerning Constitutional Irritation," p. 257.

geon that they were afraid even to try the use of the needle instead of the ligature, and this though they were surrounded by a staff of able and skilled professional assistants. Dr. Davidson's experience and success should surely serve as a sufficient answer to that weak argument against acupressure.

"During the last three years and a half," writes Dr. Davidson to me, "I have used acupressure in about thirty cases, chiefly amputations, and also in accidental wounds, and after the removal of tumours. Although I have had no professional assistance in any of my operations, I have never had the slightest difficulty in applying acupressure. Indeed the much greater ease and quickness with which acupressure is applied as compared with the ligature are to me in my isolated position very strong recommendations in favour of the former. I have never had a single case of secondary hæmorrhage where acupressure was used. The wounds have healed more quickly and with less suppuration than when the ligature was employed.

"The method which I usually employ is what is described as the third in your work. I usually withdraw the needles in forty-eight hours, and, with most surgeons, I feel much relief when I have thus the wound free of all foreign bodies. In several instances I have applied acupressure to the largest artery which is ever cut in operations—namely, the femoral. I have never seen any cases of pyæmia; but this disease is rare in Madagascar. From the comparative facility and security with which acupressure can be applied, I have no doubt that when I come back from Madagascar—some years hence—I shall find it in common use in some British hospitals where it is not thought of at present; for it only requires a fair trial of it to prove to any unprejudiced mind its superiority over the ligature. "Yours very truly,

"ANDREW DAVIDSON.

"P.S.—I have used chloroform in hundreds of cases, and it is always given upon a folded handkerchief by one of the native assistants, none of whom have ever received a professional education. People come forty and fifty miles to be operated on; and they always ask for this 'rano-matory' or 'sleeping water,' as they poetically term it, and it is as well known in the capital of Madagascar as in the capital of England.—A. D."

Edinburgh, Feb. 16th, 1867.

ON

POLYPUS OF THE NOSE;

MORE PARTICULARLY IN REFERENCE TO ITS TREATMENT.

By THOMAS BRYANT, F.R.C.S.,

ASSISTANT-SURGEON TO GUY'S HOSPITAL.

IN this communication it is my intention to confine my observations entirely to the consideration of the simple mucous or gelatiniform polypus of the nasal passages, more particularly in reference to its treatment; for these cases, in their nature and progress, differ essentially from the fibrous or more solid forms of polypi, and in their treatment require very different measures. The practice I am about to suggest and to prove of value in the one kind will be found absolutely useless in the other; and the treatment which is called for in the firmer forms of growth is, as a rule, unnecessary in the simple or mucous variety. The diagnosis of the case, as a consequence, becomes of primary importance, for a correct treatment can only be carried out when the true nature of the disease is fairly appreciated.

It might be thought that it was not a matter of much difficulty to form a diagnosis as to the existence or non-existence of a nasal polypus, and that the differential diagnosis of the different kinds was readily made. Yet it must be admitted that such is not the fact, for the cases are not rare which are brought under our notice as examples of polypi in which the symptoms present are without doubt due to the presence of a deformed nasal septum, or a thickened state of the mucous membrane covering the lower turbinated bone; indeed any disease causing symptoms of obstruction to a nasal passage is, as a rule, set down as being one of polypus. A few words,

therefore, with reference to the diagnosis of the kind of polypus to which the treatment I am about to recommend is alone applicable, appear to be necessary.

Diagnosis of the mucous polypus.—These growths are seldom recognised in the early period of their existence, for they are rarely accompanied by any pain or other inconvenience beyond that of a slight excess of discharge, and this is generally looked upon as the result of "cold." This discharge will, however, probably be of a more serous character than is usually found to exist in an ordinary coryza. Should the nose be examined at this stage of the disease by the aid of a speculum and a reflector, or good sunlight, a pale, semi-transparent, succulent-looking outgrowth, not unlike a skinned white grape, or a fringe of many such grape-like bodies, will probably be seen hanging from the middle turbinated bone; for these polypi never grow from the nasal septum, but almost always from the bone to which I have alluded.

When the disease has progressed a stage beyond the one we have described, obstruction to the nasal passage will become a marked symptom, and this condition will vary in degree from a slight impediment to nasal respiration to its complete prohibition, according to the size or number of the polypoid growths. These polypi may grow so large or be so numerous as not only to completely fill the nostril or nostrils, but they often expand the nose, and are not unfrequently found to project externally through the nasal orifice, or plug the posterior nares and upper part of the pharynx.

The conditions for which this disease is the most commonly mistaken have already been mentioned—viz., a crooked nasal septum and a thickening of the mucous membrane covering the lower turbinated bone. The knowledge, however, of the fact that these conditions may give rise to symptoms which have been mistaken for nasal polypus should be amply sufficient to induce the surgeon to make a careful local examination, when the error of the diagnosis will be at once discovered.

We will now proceed to the more immediate object of this communication—the treatment of the disease.

Treatment.—There has hitherto been but one kind of practice adopted for the treatment of these nasal polypi to which anything like success can be attributed, and that is their forcible abruption by means of instruments. Some surgeons employ a large pair of well-made forceps, which are carefully applied to the peduncles of the growths; whilst others prefer the "noose," or instrument by which a wire or cord is slipped over the body of the polypus, and its neck encircled. In both instances the growth is forcibly torn away from its attachments and relief afforded. As far as it goes this treatment is doubtless good, and may be employed whenever the polypus is of sufficient size to require interference; but all surgeons are aware of the unsatisfactory condition of patients who have been thus treated. It is true the chief portions of the disease for which the surgeon has been consulted may be removed, and a certain measure of relief afforded to the patients; but how long can this relief be promised? How soon will the same symptoms of the disease reappear, and a fresh operation be demanded, to be followed by the same relief, relapse, and surgical interference? We all know these cases may go on during the patient's life; that the period of immunity from the disease may vary in different patients, or even in the same patient at different periods; but we also know that, as a rule, a return will take place, and that sooner or later a repetition of surgical treatment will be called for.

It was this unsatisfactory state of matters which induced me to look about for a different plan of treatment, and having now employed it for some years with invariable success, I can with considerable confidence recommend it for general adoption. I am disposed to regard it as a practical wrinkle of no mean value in the treatment of a hitherto very intractable affection, and it is with some little pleasure that I now bring it publicly before my professional brethren. I propose to demonstrate the practice by the quotation of cases.

CASE 1.—The first case in which I was led to adopt the practice in the year 1862, was in a young woman, E. C—, aged thirty-two, who had been under my care at Guy's Hospital for several years. She had both nostrils affected with polypi, and for this she sought relief about every three months. Her nostrils were remarkably small, so that the operation for removal was one of difficulty. I had tried the injection of astringent lotions with no success, or with so little that it was not worth describing under that name, and gave them up. I then looked about for some powerful astringent that might be locally applied, and that would yet be innocuous to healthy mucous membrane, and found it in tannin. I ordered