catarrhs of the nose and throat and of the pharynx, and in spasms and cough set up by naso-pharyngeal irritation.

4. *Among the obstructive and naso-pharyngeal troubles permanent or progressive structural defects, such as narrowing of the passages, polypi, adenoid growths, etc., are curable only by surgical means.* But striking alleviation of any superadded congestion or catarrh may be brought about by the use of oil, which is particularly indicated for impacted foreign bodies. Much benefit may accrue in children suffering from large tonsils or adenoid growths, and from nocturnal restlessness and cough, if the mucous membrane can in this way be kept free from irritative congestion, swelling, and dryness, by protecting it from the results of open-mouth breathing. The same applies in the adult, where the nostrils are blocked by a polypus or by secretion and swelling.

5. *Dry naso-pharyngeal catarrh and granular pharyngitis* are both susceptible of much relief. The treatment is specially adapted to cases in which dense adhesive mucus forms scabs on the pharynx, and leads to the well-known distressing symptoms; and as a protecting agent it also may be of much service in granular pharyngitis. Acute catarrhal pharyngitis, if submitted to this local treatment sufficiently early, when the sore, raw feeling, or the stiffness and pain limited to one spot, with which the affection often begins, are first perceived, would probably be manifestly relieved, but there are no cases to report. This might be the means of checking the usual extension of the catarrh to the mucous membrane of the trachea and large bronchi.

6. *Bronchial catarrh* of the large tubes, or common chest cold, is frequently the sequel or the concomitant of naso-pharyngeal catarrh. This conjunction led the writer to try the treatment in his own case, and he was much impressed by the relief afforded, not only to the nasal catarrh, but to the chest symptoms, including retrosternal pain and rawness, painful cough and expectoration. He has since then observed equally satisfactory results in other cases.

Remarks on the Treatment of Tracheal and Bronchial Catarrh.—It is difficult to explain how a local application in the nose can relieve the chest, since it is doubtful whether the oil, although spreading so readily, can find its way downwards into the air passages. The influence is probably one partly brought about by associated nerve agencies. If, therefore, we regard the resulting relief as one merely reflected from the pharynx, we can hardly expect that the nasal method can be of much service in bronchitis of the smaller tubes. On the other hand, the direct application of oil might perhaps be of use, and one at least of the cases narrated is an instance of the success of this treatment in the broncho-pneumonia of diphtheria. The results noted from the indirect or intranasal method causes us to inquire again whether the more frequent use of intralaryngeal injections might not be of advantage. Hitherto they have been chiefly employed in chronic pulmonary affections; but if directed to the cure of the more acute catarrhs of the large tubes, their efficacy might be more manifest, and probably many a protracted chest affection might be avoided or considerably shortened in duration. It may be thought that this is too powerful an engine to apply to small work. But the intralaryngeal injections are really not troublesome to the patient if successfully performed, and their performance presents no difficulty to anyone familiar with the laryngoscope.

On the other hand, it would be premature, without previous trial, to recommend intralaryngeal injections in broncho-pneumonia, and their desirability in acute bronchitis must also remain an open question till further experience has been gained.

7. *Asthma.*—It is well known that in a proportion of cases of asthma the affection is connected with some nasal trouble, usually a congestive hypertrophy of the mucous membrane; and the opinion has been held that asthma itself is a congestion and swelling of the bronchial mucous membrane. The late Sir Andrew Clark took that view. Only a proportion of these cases yield to local nasal treatment by the galvanocautery or to local medication such as that by perchloride of mercury, carbolic acid and quinine, formerly recommended by Sir Andrew Clark. Among the local methods which might still be resorted to in the unrelieved cases the present one suggests itself for trial. But in the probably larger catarrhal group the indication is a double one, and it is to this group that the following cases belong.

The first case was the most successful, that of a man aged 58, of gouty parentage and the bearer of Heberden's nodules, suffering from severe catarrhal asthma and emphysema, which no form of treatment seemed to relieve. His chest symptoms dated back to influenza six years previously, and his dyspnoea had unfitted him for work for fifteen months. His present severe attack had lasted almost unabated for six weeks, when a trial of this method was suggested to the writer by the relief he had personally obtained from it. The treatment by carbolic oil gave immediate results. The nose which had been blocked, became pervious, and the dyspnoea, as well as the catarrh, was greatly relieved. In this case the relief was kept up, and the patient never complained of the treatment, but ascribed his improvement to it. After a while the parolein solution of menthol, thymol, and eucalyptus oil was substituted for the oil, and this also gave much relief, and was preferred to the other application; but the symptoms had no longer presented any severity when it was first tried.

The second case was also striking in the immediate relief given by the application of the oil during a protracted attack of asthma which the inhalation of the datura cure and Himrod's cure, the former usually a sovereign remedy in this case, had been tried ineffectually for several hours. The patient was orthopneic, and inhaling Himrod at the time the treatment was applied. Under its influence the spasm relaxed, and the patient was soon able to lie down. This attack had originated in the hospital after an attack of articular gout, for which the patient had been admitted. He had been liable to occasional asthma for sixteen years. In spite of this conspicuous relief to the asthma, the patient did not care to submit to the treatment for the remaining catarrh, which was dealt with in the ordinary way.

In another case of inveterate catarrhal asthma recurring in the winter months since the age of 10, for which the datura inhalation was usually an immediate cure, but which on this occasion failed to be relieved by it owing to the severity of the catarrh, the introduction of carbolic oil into the nose did not control the symptoms, and other treatment was applied, the symptoms yielding gradually. At a later date the carbolic oil was again used for the catarrh, with good, though not striking, results, and the parolein solution was substituted after a while.

The conclusion to be drawn from these experiences is that the method is well worth trying, but cannot be relied upon to benefit every case of asthma, though its trial will probably not be detrimental in any of them.

In reviewing the whole subject it should be understood that these are suggestions rather than dogmatic statements as to the absolute value of the method; whilst its failures may sometimes have more to do with questions of detail than of principle. Much will depend, for instance, upon the kind and the strength of the ingredients added to the oil; and idiosyncrasies have to be borne in mind. Again, the mode of application and the amount injected at one time may have to be varied according to the case; but in all cases the application in the form of spray will probably be more efficacious as well as more acceptable than either the simple injection or the dropping method.

REFERENCES.

¹ BRITISH MEDICAL JOURNAL, November 27th, 1897. ² *Loc. cit.*

ONE HUNDRED CASES OF PULMONARY TUBERCULOSIS TREATED WITH LARGE DOSES OF BEECHWOOD CREOSOTE.

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I AM indebted to the visiting physicians of this hospital for permission to record the results obtained by treating 100 cases of phthisis with large doses of creosote. Some twelve months ago I noticed that patients objected much less to a mixture of cod-liver oil and a few minims of creosote than to the oil without the antiseptic, and with the sanction of the physicians I determined to watch the effect of gradually increasing the dose of creosote, and was surprised to find that the toxic symptoms which are said to accrue from the administration of large doses of this drug were absent in practically every case; indeed, in the majority of cases this seemingly nauseous mixture was taken without the slightest complaint, whilst in no case did any bad effect result.

As I have been unable to find any detailed account of the best method to adopt in giving creosote in large doses by the mouth, and as attention to details appears to be of the greatest importance to ensure that more than 90 per cent. of consumptive patients will take these so-called poisonous doses without discomfort, as well as to know accurately the amount of creosote taken on any day throughout the treatment, it will perhaps be advisable to give a fairly full description of the method which has been found most efficacious at this

hospital during the past nine months, if only to show that creosote is worthy of further trial before being cast aside for its more expensive and more fashionable substitutes, the carbonates of creosote (creosotal) and guaiacol (duotal), which are at present too costly to be used by the large majority of phthisical patients, if these drugs are to be given in efficient doses and for a sufficiently long period to have any lasting effect. The large doses are usually prescribed as an emulsion with cod-liver oil, sometimes in a mixture containing alcohol in which creosote is freely soluble.

The drug is also ordered in the form of an "instillation," by dropping a few minims of equal parts of creosote and alcohol on an oro-nasal respirator; and a few cases, especially those expectorating large quantities of foetid sputum, have been treated in the "creosote chamber," which was introduced by Dr. Arnold Chaplin in 1894 and described by him before the Hunterian Society.¹ The two latter methods are merely adjuncts to the administration by the mouth. In the majority of cases the following formula has been prescribed: R Creosoti $\mathfrak{m}\mathfrak{v}$; ol. morrh. ad $\mathfrak{z}\mathfrak{i}\mathfrak{j}$. M. Three times daily after food. Five minims of creosote are added every other day to each dose up to a maximum of 40 minims three times a day, so that on the fifteenth day of the treatment these patients are taking 2 drachms of the pure drug daily with 4 drachms of cod-liver oil. In the last ten cases of this series, however (and I might add in nearly every case since), the maximum dose has been further increased to a drachm three times daily, so that by the twenty-third and subsequent days these patients are taking equal parts of creosote and cod-liver oil. In order that no mistake may arise it is advisable to write the dates on the patient's bottle upon which the dose must be increased, and gradually cross them out as the drug is added, and for subsequent reference the dose is entered on the temperature chart as the prescribed amount is given. Should a patient be unable to take cod-liver oil the creosote is then prescribed in the following spirituous solution: R Creosoti $\mathfrak{m}\mathfrak{v}$; tinct. gent. co.; spirit. vini rect., $\mathfrak{aa}\mathfrak{m}\mathfrak{x}\mathfrak{x}$; ext. glycyrrh. liq., $\mathfrak{z}\mathfrak{s}\mathfrak{s}$; aquam ad $\mathfrak{z}\mathfrak{j}$. M. Three times daily after food. Five minims of creosote are added to each dose every other day, as with the oil and creosote emulsion. The amount of spirit in this mixture will dissolve about 20 minims of creosote to the ounce, but when the larger doses are reached an emulsion is formed with the extract of liquorice when the bottle is shaken. It is therefore preferable to dissolve the creosote in the spirit before adding the other constituents.

Though it is of the greatest importance to give the drug only on a full stomach, it is equally important that some discretion should be used in the choice of the meals after which the drug should be taken, for some patients who are unable to take the emulsion during the earlier half of the day without the slightest discomfort, complain that the oil "repeats" when administered in the evening, whilst others like it better after supper than after breakfast or luncheon.

Patients sometimes complain that creosote causes a burning sensation in the throat when swallowed, but unless there is some local inflammatory trouble involving the pharynx or upper parts of the larynx, the discomfort is at once relieved by sucking a piece of lemon or sipping a little milk or water. Even when the large doses are reached, indeed, a patient has usually no more trouble after taking a drachm dose than he had after a dose of 5 minims a month previously, if the amount has been gradually increased and given in the way described above.

In regard to the other methods of giving creosote, namely, by fumigation, instillation, inhalation, subcutaneous and intratracheal injection, or in the form of pills or capsules, only the two former have been employed at all extensively in this hospital during the past two years. The other methods have been used only when there was some particular reason for selecting a special form of prescribing the drug.

In this series of 100 consecutive cases in which creosote was given in doses gradually increasing to 40 minims three times a day, only 5 patients were unable to continue taking the drug. Two of the latter were women with very advanced disease, both of whom died within three weeks after their admission. The third objected both to the smell and taste of creosote, neither could this patient be persuaded to take

the cod-liver oil alone, or mixed with extract of malt. The other two were able to take cod-liver oil, but not when creosote was added to it. The two latter were the only patients who preferred oil alone to an emulsion of oil and creosote. In all the other cases the latter drug either made no material difference, or its addition made the cod-liver oil more palatable.

Of those patients who were able to take the drug, 85 took 40 minims three times a day, and 10 were having 3 drachms daily at the time of their discharge.

As no less than 95 per cent. of all cases can take at least 120 minims daily without any ill-effect, but, on the contrary, with great benefit, it is evident that a much larger amount can be ordered in many cases if it is thought desirable; but, with two exceptions, larger doses were not prescribed, as it was thought advisable to ascertain that no harm could accrue from giving 2 to 3 drachms daily before still further pushing the drug. The two exceptions mentioned were suffering from bronchiectasis, and the amount was increased to 240 minims daily by giving the emulsion four times a day. In addition to this, the patients were exposed to the fumes of coal-tar creosote in the "creosote chamber" for four hours daily, and each wore an oro-nasal inhaler sprinkled with creosote and alcohol throughout the night, so that the amount of this drug introduced during every twenty-four hours through the combined alimentary and respiratory systems must have been enormous; and though this treatment was continued up to the time of their discharge a month later, both men took their food with relish, gained in weight, their sputa became less offensive and less profuse, and their urines remained normal, except that they assumed a faint olive-green colour. It is perhaps questionable whether these enormous quantities of creosote can be absorbed; the average limit, however, has not yet been determined either clinically or experimentally.

Though it was thought advisable in a few cases with much gastric trouble to commence with the creosote mixture without increasing the dose instead of the creosote and oil, and to prescribe the latter when the stomacic irritability had subsided, these 100 cases have in no way been selected, creosote having been ordered irrespective of the condition of the patient or the stage of the disease.

Of the 100 cases, no fewer than 62 had disease of both lungs, and 18 showed signs of cavitation, many were of an acute type, 3 had diarrhoea, and 4 were suffering from albuminuria when the creosote treatment was commenced. In all doubtful cases the drug was not prescribed until tubercle bacilli were found in the sputum.

In 68 cases the symptoms either partially or entirely disappeared, the patients increased in weight, and the temperature fell, or remained unchanged in those chronic cases showing little rise of temperature. The average stay in hospital of these patients was about two months, and during this short time the average gain in weight was no less than 4 lbs.

In many cases the physical signs also improved greatly, but not in comparison to the symptoms. This may have been because the patients were not under observation long enough; for the symptoms must necessarily be first relieved before any marked improvement in the condition of the lungs can be expected. Indeed, in those cases which I have had the opportunity of examining after they have attended as out-patients, and continued to take the creosote subsequent to their discharge as in-patients, I have found notable improvement in the physical signs.

Of the remaining 32 cases, 15 did not alter materially during the time they were in hospital; in 7 the disease showed signs of advancing at the time of their discharge; 5 patients died whilst under treatment; and 5 were unable to take the drug for reasons stated previously.

The albumen disappeared from the urine in all of those cases suffering from albuminuria when the treatment was commenced, although in one case this did not occur until after the patient was taking 165 minims of creosote daily. In 2 of the 3 cases with diarrhoea this grave complication was relieved; but the third rapidly became worse, and died; at the necropsy very advanced intestinal ulceration was found.

These results seem to show that though creosote is by no means a specific for pulmonary tuberculosis, it is certainly worthy of a place of importance amongst the drugs used in

the treatment of this disease, more especially for its marked effect on the symptoms, though how the drug exerts its beneficial action—whether through its antiseptic action in the alimentary canal stopping the pathological fermentative changes which occur in the gastro-intestinal tract in these cases, or by neutralising the toxins generated by the tubercle bacilli and other micro-organisms present in the lungs of patients suffering from chronic phthisis,² or, as other observers contend, by promoting sclerotic changes³—is a question which requires further investigation. Furthermore, it would appear that this beneficial action is more marked when the larger doses of the drug are administered.

Having had the opportunity of watching day by day these 100 patients while they were taking creosote, I would enter a plea against the generally-accepted idea that large doses of this drug are poisonous, or at least are so irritant that it is inadmissible to prescribe more than minute quantities.

Severe pain in the throat during and after swallowing the drug, anorexia, nausea and sickness, pain in the epigastrium, diarrhoea, and other symptoms of gastro-enteritis are some of the ill-effects said to be produced by creosote; it is also credited with the production of hæmoptysis and sometimes of nephritis, whilst in other cases profuse sweating and collapse, and even coma have supervened, when a dose of 20 minims has been administered. If the best beechwood creosote is used and given with care in the way described above, even the least serious of these symptoms will rarely occur.

The burning sensation in the throat when the drug is swallowed never amounts to more than a little discomfort, which is often entirely avoided by taking the emulsion in milk, or immediately relieved by sucking a piece of lemon or drinking a little beef-tea or fruit-juice afterwards.

Anorexia, nausea, and sickness are rarely complained of, even then it is usually found that the oil rather than the creosote is the cause, for these patients will take the same dose of creosote if given in a spirituous solution without the oil. In the majority of cases the appetite is increased and the symptoms of dyspepsia disappear. The troublesome eructations so common in phthisis are invariably relieved, so that such antifermentative remedies as pills of thymol and galbanum and mixtures containing carbolic acid or its derivatives are never required.

Creosote tends to act as a gentle laxative by increasing the intestinal peristalsis, so that, in spite of its antiseptic action, it should be ordered with caution when much diarrhoea and other signs of intestinal ulceration are present. On *post-mortem* examination no circumscribed inflammations of the mucous membrane of the stomach and intestines were found, though these lesions have been demonstrated by Bourget⁴ after the drug has been given in capsules. Though a large number of patients gave a history of previous attacks of hæmoptysis, only one had an attack while taking creosote.

The two following cases are of interest in this connection. A man stated that he had had several profuse attacks of blood-spitting during the twelve months before his admission; the last attack occurred four days before he came to the hospital. On admission, his sputum was much stained, and five days afterwards he suddenly brought up 2½ ounces of bright blood; the following day the creosote and oil emulsion was prescribed, the former drug to be rapidly increased as in other cases. Two days later he had another attack, when he expectorated 2 ounces of blood, after which he had no recurrence of the hæmoptysis up to the time of his death, which occurred five weeks later from pneumothorax, although he had then been taking 2 drachms of creosote daily for over a fortnight.

Another patient had had hæmoptysis every menstrual period for the previous six months, although for half this time she was under careful treatment as an in-patient at another hospital, so that the accuracy of her history was easily confirmed. After taking creosote in increasing doses for a week, her sputum became stained slightly, and the following day she began to menstruate; the period lasted for four days, and was unaccompanied with any hæmoptysis. She remained in hospital over two other menstrual periods, neither of which was accompanied with any hæmoptysis, though during the last six weeks she was taking 3 drachms of creosote daily. Other similar instances might be quoted,

but these two cases, together with the facts already mentioned, will, I think, suffice to show that large doses of creosote do not tend to cause hæmoptysis, but that this drug acts as a hæmostatic in cases of phthisis.

In regard to the action of creosote on the kidney, the supposed toxic effect of the drug on this organ has also apparently been much exaggerated. In only one case did albumen appear in the urine when absent on admission, and in spite of repeated examinations the albuminuria was only present for three days, though this patient was taking 180 minims of creosote daily, and continued this amount until his discharge a fortnight later; in this case the disease was very advanced, and just before the albumen was found in the urine the temperature suddenly ran up very high, so that it is not improbable that the albuminuria was caused by a sudden acute exacerbation of the tuberculous process accompanied with a febrile temperature, than due to the creosote.

The urine has been frequently and carefully examined in all these cases, but in no other was there any trace of albumen in so far as the ordinary macroscopic tests would demonstrate. In the four patients who had albuminuria on admission, the albumen rapidly disappeared, though possibly the creosote had little or no influence in effecting this change. Neither the quantity, specific gravity, nor the reaction appears to be changed in the slightest, nor is the daily quantity of urea excreted materially altered by large doses of creosote. In nearly all cases the urine is slightly changed in colour, whilst in about 20 per cent. it assumes a dark olive-green or a brownish tint. This is best seen in urines containing a fair amount of pigment normally, and it becomes even more marked after the specimen has been allowed to stand for a few days.

The amount of discoloration of the urine is not proportionate to the amount of creosote administered; indeed, it is not infrequently found that a patient's urine is darker in colour when he is taking the small doses of creosote than when he reaches the larger quantities, so that the colour of the urine is of no assistance in estimating the amount of creosote which has been taken or absorbed.

Dr. Eschle⁵ has shown that creosote is excreted by the kidneys in the forms chiefly of guaiacol and cresol combined partly with sulphuric and partly with glycuronic acids, and can only be separated by distillation with sulphuric acid. Creosote is probably decomposed into its various constituents in the stomach, by far the chief of which is guaiacol (60 to 90 per cent. in beechwood creosote), and it is probable that the compound drug owes its chief value to guaiacol, though Dr. Solis-Cohen⁶ states that pure guaiacol is less efficacious in the treatment of phthisis than when given in combination with cresols and phenols and the other constituents of creosote. Dr. Walters⁷ says that Professor Poggi has shown by experiment that no more than 15 to 20 minims of guaiacol can be absorbed per diem by the alimentary canal; this, however, was subsequently denied by Dr. Seifert,⁸ who quoted Dr. Eschle's experiments upon himself, which demonstrated that at least 100 minims were daily excreted in the urine alone for four consecutive days after taking carbonate of guaiacol, and as the latter drug passes through the stomach unchanged, and is only slowly decomposed when it reaches the intestine, whilst pure creosote is rapidly split up in the stomach, the amount of guaiacol absorbed will probably be greater after the administration of creosote than when duonal is given. And since creosote is said to be also excreted by the skin, lungs, and faeces, the maximum amount of guaiacol which can be absorbed daily must be much larger than Poggi's experiments appear to indicate.

It is generally stated that creosote gives its characteristic, and somewhat disagreeable, odour to the breath of patients who are taking large doses of the drug. This is, however, contrary to my experience; indeed, within half an hour subsequent to the administration of these very large quantities of creosote, I have been unable to detect the faintest smell either in the expired air or the sweat to indicate that the patient had recently taken any of the drug.

Although creosote, as salts of guaiacol, cresol, etc., is largely excreted by the kidneys, it is extremely uncommon to detect the odour of guaiacol in the urine; but if the specimen be set aside for a few weeks the characteristic smell usually becomes apparent. In this connection it is interesting to

note the marked "keeping" properties of the urines of patients taking large doses of creosote. I have allowed some of these specimens to stand for nearly two months without any change occurring in their reaction or production of fermentative changes. I have, unfortunately, not had the opportunity recently of treating a case of cystitis, or other disease of the genito-urinary tract in which fermentative changes occur, and where a non-irritant disinfectant would be of value, but it seems possible that creosote would be of use in such a case, seeing that no symptoms, either subjective or objective, have been noticed in any of these cases to show that the drug produces the slightest irritation when the mucous membrane is normal, though, of course, it might prove harmful to a diseased mucous membrane.

Lastly, it is asserted by many that creosote cannot be given to children in more than minute doses. I regret I have not had the opportunity of testing this objection, as few children suffering from phthisis are admitted into this hospital. I have, therefore, only been able to watch the effects of the drug in three cases. Two of the patients were 5 years of age and the other was 2 years older. The two former had marked pulmonary tuberculosis, the latter was suffering from fibrosis of the left lung with bronchiectasis and foetid expectoration. They all took 30 minims of creosote three times daily, with decided improvement in each case, and certainly no signs of toxæmia.

Having compared the objections raised against the administration of beechwood creosote in phthisis with the results obtained at this hospital by treating 100 cases with this drug, I would suggest that the following points are worthy of consideration and further investigation.

1. The best beechwood creosote can be given with benefit, in amounts varying from 120 to 240 minims daily, in cases of pulmonary tuberculosis.

2. The drug is best administered in cod-liver oil or in a spirituous solution, and in some cases the "creosote chamber" or oro-nasal inhaler may be ordered in addition, with advantage.

3. The dose should be small at first, but it can be rapidly increased to 40 minims three times daily for an adult. In 3 cases doses of 30 minims three times a day were well borne by children.

4. Large doses rarely cause any gastric disturbance; on the contrary, the appetite is frequently increased, symptoms of dyspepsia disappear, and cod-liver oil is more easily assimilated. The cough, expectoration, and night sweats are diminished, and the physical signs improved.

5. Owing to its disinfectant action in the alimentary canal the drug probably diminishes the risk of tuberculous enteritis by autoinfection when patients swallow their sputa, but owing to the increased peristalsis, which is created by creosote, it is usually contraindicated in cases where the ulceration is already advanced.

6. The drug does not tend to cause hæmoptysis, but rather to prevent its recurrence.

7. Creosote does not irritate the normal mucous membrane of the genito-urinary tract.

8. Owing to its extremely small cost pure creosote can be given to a much larger number of patients than the carbonates of creosote and guaiacol, which respectively cost four times and twelve times as much as the older drug.

REFERENCES.

- ¹ Hunterian Society, October 24th, 1894, and BRITISH MEDICAL JOURNAL, 1894, ii, 1177. ² Hoch, Wiener mediz. Blätter, 49, 1896. ³ Burney Yeo, *Clinical Therapeutics*, 1895, ii, p. 23. ⁴ Quoted by Hans Nordt. ⁵ *Zeitschrift für Klin. Med.*, xxix, 3 and 4. ⁶ Hare, *Textbook of Pract. Therap.*, 1892, p. 860. ⁷ *Lancet*, 1896, ii, 368. ⁸ *Ibid.*, p. 1373.

PAPILLOMA OF THE NASAL SEPTUM.

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As true papilloma of the nasal septum is undoubtedly of rare occurrence, every instance met with should be added to the list of recorded cases. The following case, sent to the Royal Ear Hospital by Dr. Alexander, agrees in its microscopical

characters with those laid down by De Santi,¹ and may therefore be regarded as qualified for addition to the record.

E. B., female, aged 20, complained of pain in the right nostril lasting for three months. There was occasional slight bleeding on rubbing, picking, or blowing the nose. Some difficulty of breathing on the same side had been noted. On examination a small papillary growth was seen in the vestibule growing from the cartilaginous septum about three-quarters of an inch from the orifice. It bled rapidly on touching with a probe. There was in addition slight hypertrophic rhinitis with a small spur on the right side. The growth was easily removed, under cocaine, with the cold snare. It consisted of unbranched fimbriæ springing from a base about half an inch in breadth. The fimbriæ under the microscope were found to consist of a central vessel, with a very small amount of fibrous stroma, covered with several layers of epithelium. The specimen, a photograph, and section were shown at the Laryngological Society of London on April 13th.

Owing to the confusion caused by the papers of Hopmann² and Schaffer, in which both authors have included a number of growths which are not true papillomata, it is somewhat difficult to arrive at the number of undoubted cases on record. In compiling the following list I have not mentioned those in which no microscopic examination was made. Wright³ remarks "it is impossible to say how many cases of true nasal papilloma have been observed." He gives an excellent summary of the bibliography.

REFERENCES.

- ¹ *Lancet*, December 8th, 1894. ² *Archiv f. patholog. Anat. u. Physiol. u. klin. Med.*, No. 93, 1883, p. 213. ³ *New York Med. Jnl.*, December 26th, 1891.

BIBLIOGRAPHY.

- Arrowsmith, 1 case mentioned by Wright. Butlin, 1 case, *St. Bartholomew's Hosp. Reports*, vol. xxi, 1885. Cohen, 1 case, *Rivista Clinica e Terapeutica*, No. 2, February, 1887, p. 75. De Santi, 1 case, *Lancet*, December 8th, 1894, p. 1341. Ingals, 1 case, *Trans. American Laryngol. Assn.*, 1889, p. 64. McBride, 1 case, *Diseases of Throat, Nose, and Ear*, p. 295. Mackenzie, 5 cases, *Dis. of Throat and Nose*, vol. ii, p. 377. Noquet, 1 case, *Revue de Laryngol.*, June 1st, 1891, No. xi, p. 339. Nuthall, of St. Louis, 1 case, mentioned by De Santi. Swain, 1 case, *Trans. American Laryngol. Assn.*, 1895, p. 179. Turner Logan, 1 case, *Proceedings of the Laryngol. Soc. of London*, vol. iv, p. 21. Wright, 1 case, *New York Med. Jnl.*, December 26th, 1891; 1 case, *Trans. American Laryngol. Assn.*, 1895, p. 177.

A CASE OF GANGRENE OF BOTH FEET IN AN EARLY GENERAL PARALYTIC.

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THE trophic changes in general paralysis are many and varied, the most common being the occurrence of a large sloughing bed sore, usually forming very quickly; but the rapid and simultaneous occurrence of gangrene involving both feet is so unusual and perhaps unique that I have thought it worthy of recording. The case is as follows:

M. D., aged 50 years, was admitted to the Joint Counties Asylum, Carmarthen, on January 12th suffering from what appeared to be general paralysis of the insane, the supposed duration being fourteen days. Her mental condition mainly showed considerable loss of mental power, with ideas of grandeur as regards money, her musical capabilities, her connection with the Royal Family, etc. Physically she was a well-built woman, inclined to obesity, with flabby muscles, and exhibiting various signs which pointed to changes in the nervous system. The pupils were unequal, right larger than left, and the latter reacting much more readily to direct light and accommodation. There were coarse tremors generally, and the speech was suggestive of general paralysis. The left knee-jerk was exaggerated, but there appeared to be no motor or sensory paralysis. On January 15th she was examined carefully and nothing unusual noticed. On the following day, however, both feet were found to be cold and of a dark blue colour, nearly black, with swollen dorsa and ankles and considerable tenderness. There were swellings in each popliteal space and on the outer side of the left knee-cap a black patch, the latter disappearing in a few days. Her general condition was good and the temperature normal. The treatment adopted was thorough disinfection of the parts and protection in cotton wool.

By January 17th a change was noticeable. She was very exhausted, with a weak pulse and a dry brown tongue. The feet had become warm except the toes, and the dorsum and ankle had assumed a dull red black colour. The temperature in the evening was above normal. In three or four days blebs formed, and the peculiar odour of gangrene exhaled. She was restless and sleepless, requiring hypnotics, but otherwise her general condition had improved. For some days her condition remained stationary if it did not improve; but soon a downward course commenced, and she steadily grew worse. The temperature up to January 26th was normal in the morning with an evening rise to 100°; after that the temperature was usually 100° in the morning and in the evening above 102°.