

due to some defective development in the internodular portions, for what appear to be nodes or swellings are in reality only about the size of the other normal hairs. One observer suggests that the narrowing is due to an intermittent muscular contraction around the follicle just below where the sebaceous glands empty into it, where the young hair cells are still soft and readily compressed. It is, however, a disturbance in the hair due to defective nutrition or innervation, or both, as the idea of a parasitic cause is out of the question.

SUMMARY.

We find, then, that the hair is an active, live portion of the economy, subject to various alterations, dependent on its nutrition and innervation. The well-known changes which occur in the hairy coats of animals in ill health, and which have long been recognized as a valuable indication in regard to constitutional treatment, would seem to show that the same might also occur in man.

We have found that a certain activity of the hair follicles belongs to a particular period of life, puberty, and a waning of their powers seems to be a natural sign of advancing age. We have seen that in certain conditions of nutrition and innervation, as after fevers, etc., the hair follicles in some way take on different action, and various disturbances of the hair are observed, and that the effect of profound nervous or mental strain and shock can be evidenced in the hair.

Turning to clinical experience, we find that among 15,240 miscellaneous dermatologic cases in private practice a total of 1,129, or over 7 per cent., belonged to the group of affections of the hair now under consideration. An analysis of such notes as were kept of them presented many striking features illustrating the points considered in regard to nutritive and neurotic disturbances of the hair.

It is not claimed that anything very new or startling has been developed by this study, and some might even insist that all that has been mentioned is abundantly recognized by the profession. But, while in a measure this may be true theoretically, yet practically there is yet great need that the underlying principles be put more in practice; for it is the rarest occurrence to find that patients with the diseases which we have considered have ever previously been interrogated in regard to the matters which have been mentioned, much less that any serious and prolonged attempt has ever been made to rectify the very gross errors of life which have often been discovered.

In almost every instance, indeed, if a physician has been consulted at all, there has been only some local application given, while in the large majority of cases the trouble has been left to the hairdresser. It is true that the books state in a general way that attention should be directed to the state of the general health, etc., but, as stated, practically everything but the local condition is commonly ignored when these patients apply to the physician for aid.

It was our desire, by a careful study and analysis of a number of cases, to seek to ascertain some of the underlying causes of the affections of the hair here considered, in order that we might endeavor to place on a more substantial basis the principles which would lead to a more intelligent and successful treatment of the nutritive and neurotic disturbances of the hair.

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THE DIAGNOSIS OF PNEUMONIA IN
INFANCY.*

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The diagnosis of pneumonia, the commonest of all winter diseases in infancy, is probably the cause of more error than that of any other disease and this error is largely due to the instruction ordinarily given by lectures and text-books concerning the characteristics of pneumonia in infancy. In an effort to make complete such description, portraying the different types, and differentiating between the lobar and lobular types, the whole matter, to my mind, is made obscure and more difficult for the student, although such complete descriptions are, of course, necessary in large works on pediatrics.

In the first place as to the difference between the lobar and lobular types in infancy. Occasionally a case will occur which does follow the adult lobar type, but such cases are rare, and the symptoms are not very different from those of the lobular type, the treatment is the same and there is no real necessity of any such differentiation in infancy. The most important fact and one which should be emphasized is that the pneumonia of infancy is a disease that should be recognized independently of signs ascertained by percussion or auscultation of the chest, such signs being valuable to corroborate the diagnosis and to locate the lesion. But the general picture of the disease is usually sufficient for an accurate diagnosis, and if one waits for the physical signs elicited by auscultation and percussion may have to wait until the patient is convalescent or never make a diagnosis in a really well-marked case.

This clinical picture of pneumonia in infancy has been set forth by Northrup, and it was my idea in this paper simply to emphasize the importance of recognizing it by the symptoms and to verify the diagnosis, if possible, by physical signs.

An infant with pneumonia, whether it be primary or secondary, suddenly becomes sick. The infant is dopy, indifferent or sleepy when a few hours previous it had been bright and active. It is noticed that the infant breathes much more rapidly, has a rise of temperature and usually that it develops a cough.

On taking the respiration and pulse accurately the relationship is apt to approximate 1 to 3, often going on to a ratio of 1 to 2, an ordinary observation being 50 to 150.

These five symptoms then: the sudden onset, depression, rapid respiration, fever and cough, are sufficient in many cases to create a suspicion of trouble with the lungs. In addition, another set of symptoms may be noted by observation. As soon as one looks at the infant, flaring nostrils are noted and usually the pneumonic type of breathing in which the ordinary type, consisting of an inspiration followed by an expiration and then a pause, is replaced by a type in which the inspiration is followed by a pause and the expiration accompanied by a pneumonic grunt indicating pain. Another sign occasionally elicited and very significant when present is rigidity of the neck and upper extremities, without rigidity of the lower extremities, this sign being due to a sore chest and an effort at protection.

These four signs—flaring nostrils, pneumonic breath-

* Read in the Section on Diseases of Children of the American Medical Association, at the Fifty-ninth Annual Session, held at Chicago, June, 1908.

ing and expiratory grunt, and rigidity of the neck and upper extremities—are almost pathognomonic of the disease.

The signs we find in the chest simply serve to corroborate our diagnosis. The shower of crepitant râles at the end of inspiration, the most characteristic sign; the occasional but rare area of dulness on percussion with diminished breathing, indicating an initial congestion; the presence of a localized bronchitis; all of these are of value in confirmation.

CONCLUSIONS.

1. Pneumonia in infancy is a disease furnishing characteristic signs on which a diagnosis may be based before the lungs are examined.

2. The symptoms are sudden onset, depression, rapid respiration with ratio to pulse of 1 to 3, fever and usually cough. If with these are noticed flaring nostrils, pneumonic breathing and expiratory grunt, a definite diagnosis may be made, while rigidity of the neck and upper extremities without rigidity of the lower extremities is an important confirmatory sign if present.

3. Auscultation and percussion of the chest should be used in confirmation of the diagnosis and for localizing the lesion and for information as to its character.

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THE AMBULATORY TREATMENT OF PNEUMONIA IN INFANTS AND YOUNG CHILDREN.*

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It is not so long ago that a physician who advocated placing out of doors an infant with pneumonia was thought to be defending a crime which should never be forgiven. Rapid advances along medical lines are being made, and I consider the fresh-air treatment of pneumonia to be one of the greatest and most beneficial advances that therapeutics has made in the last decade.

In advocating the fresh-air treatment I do not mean to be an extremist, for the man who goes too far is making no more progress than the one who timidly does not go far enough. It is by one's personal experience, by one's own failures and successes, that one is taught, and it is by means of these personal observations that medical science is advanced. Little do I care for the heated and lengthy discussions elicited by the reading of extreme papers on a medical subject, for if these papers be the writers' own personal observations, the authors are certainly entitled to believe what they have seen. It is with personal observations that this paper deals.

The data of the cases of pneumonia on which this paper is based are taken from the records of 2,322 cases of illness occurring in the department for diseases of children of a very active dispensary in this city. Each case was personally examined and a careful record of it kept. The usual mortality from pneumonia, especially bronchopneumonia, is high, Holt giving it as 10 to 30 per cent. in private practice and 65 per cent. in institution work. This series of cases is rather small from which to draw conclusions, but nevertheless it demon-

strates that cases treated in an ambulatory manner do present an exceedingly small mortality. In fact, I really was apprehensive of presenting these observations to you until I learned that many other men were having just as good results as my own, and I tell you frankly that some months ago I mentally remarked: "If I present this paper to a body of medical men, they will pronounce me either a candidate for the psychopathic ward, or a direct descendant of Ananias."

The ages of these patients ran from 2 months—the youngest—to 12 years—the oldest. There were many robust, well-nourished children among the number, as well as some feeble, anemic and poorly nourished patients. There were specimens of all nationalities. There were in all 36 patients—16 boys and 20 girls. There were 16 cases of lobar pneumonia and 20 cases of bronchopneumonia. These cases presented themselves in the stage of congestion and consolidation. There were bottle-fed infants and there were breast-fed infants. There were children whose diet was perfect, and there were children whose diet consisted of almost anything at any time. A case was not tabulated as pneumonia until absolutely positive signs of the disease, such as bronchial voice and respiration, presented themselves to establish a true and certain diagnosis. Some of these patients had high temperature, 104 to 106, while others had low temperature, from 100 to 102, and there were one or two patients who had a normal temperature all through the disease. There were cases with intense cerebral involvement, such as hyperesthesia and convulsions, and there were cases in which the baby seemed in every way normal, excepting some slight ailment, such as a cough or diarrhea. The majority of the patients were brought to the dispensary because the parents thought some other disease existed, such as diphtheria, diarrhea and "colds." There were many of these infants and children that did not look as though they had had any personal hygienic care for weeks, while others were clean and neatly clothed. Many of the parents were illiterate and uneducated, while others had a fair share of cerebral development, and it is to the first class of parents that I want to draw your attention. Although these people were of the poorer class, and the majority of them possessing little learning, they were all eager and willing to carry out directions as regards treatment and did it surprisingly well.

These observations are recited only to demonstrate that, given a baby with pneumonia, no matter what his parents are, and no matter what his present bodily condition, a great deal can be accomplished and good results obtained by systematic treatment.

The first point in the successful treatment of pneumonia is to make a correct and early diagnosis. This can be done only by the use of a stethoscope (or small phonendoscope) and by having the baby undressed. That means naked. There is no clinician living that can pick out a small spot of solidified lung by the use of his ear alone applied to the surface of an infant's chest. This has been demonstrated to me many times. The ear is too large and does not fit the surface evenly to exclude extraneous sounds. What, then, has been the mode of treatment of these cases of bronchopneumonia and lobar pneumonia which have presented themselves at the dispensary?

INSTRUCTIONS REGARDING HYGIENE.

Fresh Air.—The mother is told in as simple a way and in as few words as possible what we expect her to

* Read in the Section on Diseases of Children of the American Medical Association, at the Fifty-ninth Annual Session, held at Chicago, June, 1908