

AN
INAUGURAL DISSERTATION

ON

Tuberculosis.

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Rubeola.

This contagious disease of the human system is ranked, at the present day, in the class of idiopathic or essential fevers. It is of the eruptive variety.

Synonyms. This affection has been described under the names, morbilli, febris morbillosa, rubcola, sarampin (Spanish), measles (English), masern (German) and rosolia (Italian).

Frequency. As almost every body ^{is} ~~are~~ liable to be attacked by measles at some period of their lives, it may be regarded as a very common affection.

Symptoms. During the progress of measles three distinct stages

are recognized, the invasion, the eruption and desquamation. Incubation, properly speaking, cannot be considered as a stage of the disease, as no symptoms are manifested during this stage period. Some authors fix the period of incubation at six days some at eight, and others again at ten days. The usual period is about eleven days.

Invasion. Occasionally the invasion is preceded for one or two days by a slight indisposition, consisting of torpor and headache, but in a majority of cases it is marked by symptoms of a decided character in the beginning. A sense of chilliness is sometimes the signal of the invasion. A more or less elevated

heat of skin, with perspiration, either general, or confined to the forehead, acceleration of pulse, furred tongue, and loss of appetite, are the principal symptoms of the febrile stage. At the same time symptoms of a decided character are observed in the respiratory tract. There is frequent sneezing with a considerable discharge of acid mucus, redness and swelling of the mucous membrane of the nose, and in a word all the symptoms of ordinary coryza. The eyes grow red and are very sensible to light. A pricking sensation is also felt in the eyes, and the tears are sometimes acid like the mucus discharged from the mucous membrane of the nose. A peculiar cough

is noted, presenting a peculiar sound by which, those who have studied it attentively are able to distinguish it with great facility. It is called by the french, "La toux ferine." some time this cough is almost incessant, and again it is very mild. There may exist at the same time hurried and difficult respiration. Occasionally the pharynx is inflamed, and together with loss of appetite, as mentioned above, there is more or less thirst. Nausea, vomiting and epigastric pains are not unfrequent concomitants of this disease. Constipation and diarrhoea are symptoms that have been attributed to this stage of measles. And when ^{the disease} ~~the~~ occurs in children

during the period of first dentition, diarrhoea is very common. The urine is thick, and high colored. Its acidity is greater than it is in the normal state, with a marked increase in its solid constituents. These are the principal symptoms that characterize the period of invasion. However it may be necessary to add that in some cases there is great anxiety, ach-ing of the limbs, insomnia, delirium and convulsions. All these symptoms are never manifested in any one case.

Eruption. The rash is characterized by minute, red spots, analogous to the pimples of small pox or of typhoid fever. They also resemble flea bites, with this difference, they under

pressure disappears, but returns as soon as the pressure is removed.

These spots which are at first distinct, soon become confluent and arrange themselves in irregular groups of a semicircular or crescentic form. Commencing first on the forehead and face, within a day or two, the eruption extends to the neck, chest and extremities. The spots on the face are generally more salient than those on other parts of the body, and this prominence is slightly sensible to the touch. About the time the eruption has attained its highest degree of development, the patient often complains of an intolerable itching. The

redness is not the same over the whole surface of the body, but it is brightest where the vascularity is greatest. The general symptoms of the second stage resemble those of the first stage very much. The mucus excreted by the pituitary membrane is somewhat thicker, the dyspnoea remains the same, the cough becomes loose, still retaining its peculiar features by which it is recognised, the voice is hoarse and feeble, and auscultation reveals symptoms of bronchitis. The face continues a little swollen, the skin is hot and dry, and the pulse remains accelerated. A sense of dryness and roughness is felt in the throat.

and it still retains the redness of the beginning. The cutaneous eruption is accompanied and preceded by an eruption of the *velum pendulum palati* and *pharynx*, which consists of small red spots. From an examination of the matter excreted from the different mucous membranes, writers on this subject have arrived at the conclusion, that all the mucous tracts present an eruption analogous to that of the skin. Nosmetators in medicine have given to this mucous eruption the name of emanthema. The intensity of this eruption is in inverse proportion to the intensity of the cutaneous eruption.

and reciprocally. Desquamation.

On the sixth or seventh day of the disease the eruption begins to decline and assumes a dull, tarnished, yellow color. The same rule is observed in the decline of the eruption that was noted in its progress. Disappearing, first from the face, neck and chest, and lastly from the extremities. But this is not always the case. In some mild cases it disappears very rapidly. This is not the same manner of disappearing as occasionally happens in very severe cases. Then it is called delitescence, of which I will speak further on. Desquamation takes place simultaneously with these phenomena.

It consists of very small, white, dry, furfuraceous scales of epidermis. While desquamation is going on, the general symptoms decline.

The fever abates, the ophthalmia and ~~coryza~~ disappears ^{and} the pectoral symptom diminish. Occasionally instead of the pectoral symptoms diminishing they become aggravated, and bronchitis is developed, or symptoms of pneumonia appear.

The cough becomes heavier and easier and there is an abundant expectoration of nummular sputa, expectorated, which is thick, opaque, and of a greenish yellow color, floating in a transparent mucus.

Irregularities, Diversities & Complications

Occasionally the fever that accom-
panies the stage of ~~erupt~~ invasion
is of great intensity, associated
with delirium and convulsions.

At times it is suspended a day
or two before the eruption, and
returns with much greater violence
on the appearance of the eruption.

Frequent and abundant epistaxis
~~are~~ ^{is} present, while bronchitis and
coryza are very slight or entirely
wanting. Sometimes the fever com-
pletely fails, and there is no pe-
riod of invasion, and the eruption
is the first signal of the disease.

Sometimes the face is completely
~~exempt~~ ^{from} with the eruption, while
the whole body is covered. The con-
trary rarely occurs. The color

of the eruption offers several anomalies, from a pale turned to a bright red tint. It is very rare that we see a case of this disease in which the fever, coryza and bronchitis do not exist, nevertheless cases of this kind do occur. And on the other hand some cases of the disease exist in which all the symptoms of measles are present except the eruption.

In some cases inflammation of the mouth with swelling and ulceration of ^{the} gums has been noted. It is probable that this stomatitis is due to the violence of the febrile movement and mucous eruption. And also, perhaps to the state of the blood.

Inflammation sometimes attacks the larynx and assumes the character of pseudomembranous croup.

Bronchitis— though it has been detailed as one of the ordinary symptoms of measles— when it attains a certain degree of violence may be considered as a complication.

Pneumonia occasionally occurs as a complication of measles.

Pleurisy is a complication of very rare occurrence.

Diarrhoea is a frequent concomitant and sequela of measles.

Causes. The contagion of measles is universally admitted. The inoculation of the blood, tears, saliva, and lymph from the

small vesicles of the eruption has communicated the disease. "Though the circumstance that these experiments have been made during the prevalence of epidemics, when all not protected are liable to the disease, may throw some doubt on the subject, yet the cases of asserted success are so numerous and varied, as to make the affirmative of the question greatly preponderate in the balance of probabilities.

Measles is a disease that attacks persons only once. However the exceptions to this general rule are not rare, for it has ^{been} proved beyond the shadow of a doubt that persons have been attacked ^{by} measles a second time.

The epidemic character of this disease is too well known to be insisted on.

No age is exempt from the disease. It attacks the foetus in the womb as well as persons who have arrived at a good old age.

One sex seems to be as liable to be attacked by measles as the other. It exists oftener in cold than in warm weather, though it occurs at all seasons.

As the anatomical characters are very obscure I will pass over them.

Diagnosis. In all cases it is very difficult to distinguish measles during the the period of invasion. Nevertheless when the disease is regular and attacks a patient.

who is not labouring under another affection, we can by the conjunctiva, by the redness of the eyes, by the "loux feins" and by the bronchitis precede the eruption. But we cannot always be perfectly certain. When ^{the} eruption has made its appearance, if the disease is simple and regular, the diagnosis very easy. The diversities, irregularities, complications and malignant forms of measles, necessarily present difficulties of diagnosis. I will not endeavor to ^{give} their diagnosis. The diseases with which measles is most liable to be confounded are small pox, scarlet fever and roseola. "In distinct small pox the subsidence of the fever is a sufficient diagnostic sign. In the confluent, when the fever

persists, there may be some doubt at the moment of eruption; but in measles the rash is less observably prominent and hard under the fingers; and the question is very soon decided by the stationary character of the rubellous eruption, while the variolous is rapidly becoming vesicular and umbilicated. From scarlet fever, it may be distinguished, by the occurrence of the fever eruption on the third, instead of the first day of the fever, by the catarrhal symptoms, by the absence of the characteristic anginous affection, by the peculiarity of the rash, which is less pustulated in the beginning and less uniform at last, and lastly by the crescentic ar-

renewment of the eruption. Measles are distinguished from roseola by the catarrhal symptoms.

Prognosis. When the disease makes its transit regularly through its different stages, when the febrile symptoms are not very violent and the pectoral symptoms are mild the prognosis is favorable.

When the eruption disappears very suddenly accompanied with internal irritation, when the fever is unusually violent, when the dyspnoea and other symptoms of pulmonary inflammation are considerable, when there is great restlessness, anxiety and coma, when the fever, cough and dyspnoea are continued after the decline

of the eruption and the disease assumes symptoms of a malignant character, such as a dark color of the rash, weak pulse, hemorrhage and petechiae, the prognosis is unfavorable. The occurrence of pseudomembranous croup is very fatal. Measles is more severe in old, than young persons and in the winter than in the spring and summer. It is usually very severe when it occurs in advanced stages of other diseases. And is aggravated by dentition, pregnancy and the puerperal state.

Treatment. Measles is a disease that pursues a regular progress which our Therapeutic skill is not able to limit, or cut short.

Therefore when it progresses regularly through its different stages, the treatment consists in the employment of very simple hygienic means.

Rest in bed, demulcent drinks, a mild temperature, well regulated diet, a few grains of Dover's powder if coryza and bronchitis are troublesome, are all the means necessary to be employed in regular, uncomplicated cases. When the eruption disappears, it is not necessary to call it to the surface, unless some untoward symptom coincides with its disappearance. But, when evidence of internal inflammation appears, it then becomes

necessary to interfere promptly,
and the eruption, if possible, should
be called to the surface. The means
generally employed to reproduce
the eruption, are warm drinks,
hot and vapor baths, hot, stim-
ulating pediluvia, sudorifics,
warm affusions and articulation.

The complications ought by
all means to excite in a high
degree the solicitude of the
physician.

Diarrhoea is apt to occur
during convalescence, and if not
too severe, is useful in checking
the tendency to thoracic disease.
Should it, however proceed too
far it may be treated as though
it were an ordinary case of diarrhoea.

Bronchitis and pneumonia must be managed as though they had occurred independent of measles. Pseudomembranous croup is treated as though ~~it~~ had occurred sporadically. The convulsions that occur in children, ^{or require anything more} than hot, stimulating pediluvia and warm baths. But if they are persistent and repeated, cold applications to the head and venesection may be resorted to. Malignant measles are treated by stimulents internal and external.

During convalescence, exposure to cold should be guarded against and, in inclement weather the patients should remain in his room.

The prophylactic treatment consists of inoculation & evolution.
Harris.