

AN
INAUGURAL DISSERTATION

ON

Scarlatina

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Scarlatina.

This is a febrile, contagious disease, which has for its principal characteristics, inflammation of the fauces, and a scarlet rash, appearing on the second day and generally ending in desquamation about the sixth or seventh. Scarlatina was long confounded with measles, being considered as a variety of that disease.

It was not until the year 1556, that it was noticed as a peculiar one. There have been described three varieties of scarlet fever, but as the disease is, essentially the same in all its varieties, and is produced by the same causes, I shall speak of it as a general malady. The mildest form of scarlatina, is usually

ushered in, without much rigor or disturbance of the stomach, but there is always present, more, or less pain, or disagreeable sensation in the head, with lassitude, and restlessness. This scarlet rash, which makes its appearance on the second day, begins upon the face and neck, shewing itself in innumerable little red points; which in the space of twenty four hours can be seen over the whole surface of the body.

As these points multiply, they coalesce, and by the end of the third day, the eruption presents a diffuse and continuous efflorescence over the limbs. The colour, of the rash has been compared to that, of a boiled lobster, but it is perhaps a little darker, and is more intense at the

flexures of the joints. The rash has sometimes, a rough sensation, not unlike that of gooseflesh, caused by the enlargement of papillae. The scarlet hue disappears under pressure, but returns when the pressure is removed, and is increased during the exacerbations of the fever, and when the patient cries or is otherwise agitated.

The fever does not abate with the appearance of the rash, but continues throughout its whole progress, with very frequent pulse, much more than other febrile diseases, of the same degree of violence. The skin is very dry and burning hot, with a temperature, as indicated, by the thermometer, about 105° . The fever is generally increased towards evening

attended with delirium, and restlessness,
and sometimes, with comatose symptoms.

The throat affection, in some cases
is not at all severe, but in others, seems
the most prominent and dangerous
symptom, being attended with, external,
and internal, swelling of the organs,
with painful deglutition, and impeded
respiration. The disease usually attains
its height, from the fifth to the ninth
day, when in all favorable cases, the
morbid symptoms begin to decline.

The rash fades away with diminution
of the heat of the skin, and the
pulse becomes slower and fuller. Then
the process of desquamation commences,
the cuticle separating in small flakes,
and where it is thick, as upon the palms
of the hands, and soles of the feet, it

comes off in large scales, and in some instances, it has been known to come away with a complete mould of the members. At this period, it is thought that the contagion is most active. It most generally affects individuals, but once, during life.

Recurrence of the disease has certainly been observed, but is of very rare occurrence, and such cases are merely exceptions to the general rule. The subjects of scarlatina are for the most part children. Adults are, however, by no means, exempt from it, though much less susceptible, and in them it does not appear so soon after exposure. Persons, advanced in life are very rarely attacked by it.

Children are more liable to it

because of their susceptibility to disease, and because their functions perform more rapidly, than those advanced in life, and, possibly, women are more liable to it, for the same reasons, than men. There are certain persons, who seem to be entirely insusceptible to this disease, never becoming affected with it, though fully exposed to its influence. In some epidemics, scarcely any other but children are attacked, while others are principally confined to those beyond the age of puberty.

There seems, no particular season favorable to the prevalence of scarlatina, but a warm, humid, state of the atmosphere, and low, moist, districts, would appear more favorable to its dissemination, and increase its violence.

Great irregularity, sometimes marks the progress of this disease, when epidemic, for after raging extensively with great violence, it will suddenly abate, or nearly disappear, and then recur with symptoms of greater malignancy than before.

equal.

Few diseases leave a longer train of evils behind them, than scarlatina.

Among the most common are the abscesses, which form near the parotid and submaxillary glands, which are often large and exhausting, and often the discharge of pus, from these sources is more than the weakened system can bear, and the patient, after having survived scarlet fever, dies of hectic.

They also greatly protract convalescence

and the constitution is long in regaining its wonted strength, though freed from disease. Diarrhoea is another frequent consequence of scarlatina, which is sometimes very obstinate, wearing out the remaining strength of the patient; though it may yield to judicious treatment. Serous membranes are often attacked with inflammation, either during its progress, or decline, and encephalitis, pleuritis, and peritonitis, may be added to its legacies. But the most dangerous of them all is dropsy.

The patient is liable to this during desquamation, and for sometime afterwards.

The cause is, by many, supposed to be the premature exposure of the delicate skin, to cold. But Dr Wood seems to doubt this, and says according to

his own observation, dropsy has occurred more frequently after mild cases, than severe ones. It sometimes follows cases, in which, the skin is very slightly diseased, and when no exposure to cold has existed.

It is generally in the form of anasarca, though sometimes of hydrothorax, hydr. p^{er}icardium, and even hydrocephalus.

Drowsiness, approaching to stupor, as well as, other signs of cerebral disease, are not unfrequent attendants on the dropsy of scarlatina. The affection yields to proper treatment, but is dangerous when the brain or heart is involved. Though Dr Wood only, notes one fatal case, and in that the heart was affected. It is said that in certain epidemics, dropsy has resulted from mere exposure to the contagion, without, being preceded by the usual symptoms

of the disease, which is owing to the absorption of the poison, and its direct action upon the kidneys. This has been noticed by some writers as a peculiar form of the disease, and it is proposed to call it *scarlatina latens*, but the same name, might with equal propriety, be given to those cases of sorethroat, and swelling of the salivary glands, which occasionally result from exposure to the contagion, without the other symptoms of the disease.

Diagnosis.

In the early stage, before the eruption, *Scarlatina* may be readily mistaken for many other febrile diseases. The most characteristic symptoms, are the extraordinary frequency of the pulse, and the appearance of redness in the fauces.

After the eruption, one of the complaints

with which it may be confounded is measles. From this, however, it may be distinguished, by absence of catarrhal symptoms, by the occurrence of the rash upon the second, instead of the fourth day, by the characteristic anginous affection, and by the peculiarity of its rash, which is of a brighter red colour, more punctuated in the beginning, and more uniform at last, without the clustered arrangement of the rubiculous eruption, and without its roughness.

Prognosis.

There is no complaint, in which the result is more uncertain than in this. The seemingly mildest cases, sometimes assume the most malignant form, and patients suddenly die, with profound sensorial derangement, when

supposed to be quite free from danger, and while, conversely, cases apparently the most desperate, sometimes end favorably.

Even after the case has reached convalescence, under highly favorable circumstances, there is liability to secondary serious affections.

There is in certain individuals an extraordinary tendency to the most fatal form of scarlatina. It not unfrequently happens, that two or three children die in one family, and sometimes a whole family is thus desolated, upon the same or successive occurrences, though the disease prevailing at the time may have no particular malignancy.

In such families the prognosis is always more unfavorable than in others, and special care should

be taken to guard them until the susceptibility may be supposed to have worn out with age. In judging of the probable result of any particular case, reference should always be had to the character of the epidemic. Where this is very mild, we may, with some confidence, predict a favorable issue, under apparently favorable circumstances, where otherwise, we should be more guarded. Among the unfavorable signs, are, a late appearance, deficiency, or sudden retrocession of the eruption, in connexion with other bad symptoms, such as delirium, coma, livid or purple colour of the rash, with hemorrhage, a livid appearance of the face, with gangrenous ulcers or sloughs, and

great prostration. The absence of the above symptoms and a gradual subsidence of the disease, are favorable signs.

treatment.

In simple and uncomplicated cases, no very active remedies, will be demanded. It is the duty of the physician, however, to watch closely the disease, throughout its entire course, for in the mildest form, symptoms of a severe and dangerous character, are liable to be, slowly or suddenly, developed, which it is all important to attack at once by appropriate remedies. We cannot be too much upon our guard against unexpected, and unfavorable, changes, and in no case, even the mildest, should the diligentia

medici be lost sight of. It is also important, that the treatment of every case of scarlet fever, should be commenced, if possible at the very commencement or onset of the attack, for, probably, then by the simplest remedies, administered at this period, we will often have it in our power, to effect a very important modification in the subsequent features of the case, and frequently, to render mild, and extremely manageable, an attack, which if neglected might have proved one of extreme danger and violence.

In the vast majority of cases scarlet fever would end favorably, without treatment, and it is from this fact, that homoeopathy, acquires its reputation, in this disease.

When the symptoms are very mild it is advisable to do little more than to keep the bowels open, to administer cooling drinks, regulate the diet, and to see that the apartment is well ventilated, and of comfortable temperature. A gentle emetic, given at the outset, is said to have a happy effect, in modifying its future course. I think it advisable to administer it, in every case, when seen at that stage, for though it may not be necessary, yet it can do no harm, and it is impossible to foresee what is to be the character of the case. Ipecacuanha, may be used, or a mixture of this with Tartar emetic. In all cases, except those of great mildness, it will be

proper to follow it; in children, with a purgative dose of calomel, which, if not operating thoroughly in six or seven hours, should in its turn be followed by castor oil, magnesia, or one of the saline laxatives.

Afterwards the bowels should be kept open by cathartics, which should be accommodated to the circumstances of the case; those of a depletory character, such as sulphate of magnesia, when there is much excitement, with considerable energy of system. When there is nausea and vomiting suddenly tender, Magnesia when there is acidity of the primæ viæ. Castor oil may be given when there is abdominal pain, and rhubarb when the patient is too feeble to admit of watery purgation.

In the incidental diarrhoea, advantage
will accrue from castor oil, combined with
laudium, as the bowels are thus cleared
of the offensive secretions, which are swallowed
and at the same time, rendered less
sensible of the irritant impression.

Great care should be taken not to
purge to exhaustion. The propriety
of bleeding has been much discussed
by writers, and the profession is greatly
divided upon the subject. Dr Cordie
recommends active depletion in all
cases of inflammatory scarlet fever,
without the fear of supposing debility,
remembering always, that when demand
the earlier active remedies are employed
the more efficient they will prove,
and the less doubtful is their propriety.

Considering the character of this

disease, I think it is rather a doubtful remedy, and should only be called into requisition, when there is obvious indication; such as when symptoms of inflammation of one of the vital organs, exist, and threaten great danger. In no instance, even of decided inflammation, should it be resorted to, when the pulse is full and other signs indicate a malignant tendency, and in all doubtful cases it is best to have recourse to local depletion, by cups and leeches.

Dr Wood says he has seldom found it advisable to bleed in any case, and does not remember an instance, in which it appeared to him, that he had occasion to repent his abstinence. Phlebotomy bleeding

is employed, it would be a good rule to place the patient in a sitting posture, as the failure of the pulse in that position, will sooner give warning to arrest the flow of blood, than in the horizontal. In all cases of acute serous inflammation, leeches may be employed with advantage, and in cases where the skin is burning hot and dry, and the patient experiences no chilly sensation, the external application of cold water is highly useful. When the fever is fully developed, a course of internal refrigerant treatment, should be adopted.

Preventive treatment.

It is important to guard children against this disease, as the older they grow, the less liable they are to be

attacked. Hence they should be kept separate, as far as possible, from every source of the infection, and free ventilation of the sick chamber should be employed, to dilute and dissipate the poison.

Different prophylactic remedies have been recommended, among which, *bella donna*, perhaps, enjoys the confidence of most practitioners.

This is used in very small doses; three grains of the extract dissolved in a fluidounce of distilled water, and three drops of the solution given twice a day, to a child under one year, to be increased one drop for every additional year. This is extensively used in this section of country, as a prophylactic.