

Introduction to a discussion on the diagnosis between rubeola and scarlet fever, on May 14th, 1896 / by E.W. Goodall.

Contributors

Goodall, E. W. 1861-
Medical Officers of Schools Association.

Publication/Creation

London : J. Churchill, 1896.

Persistent URL

<https://wellcomecollection.org/works/hwjkhfna>

License and attribution

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

8

Medical Officers of Schools Association.

INTRODUCTION TO A DISCUSSION ON THE DIAGNOSIS BETWEEN RUBEOLA AND SCARLET FEVER.

ON MAY 14th, 1896.

BY

E. W. GOODALL, M.D. LOND.,

*Medical Superintendent of the Eastern Hospital of the Metropolitan
Asylums Board.*

Reprinted from the "Guy's Hospital Gazette."

Published by order of the Association,


H. ALDERSMITH, } *Hon. Secs.*
C. E. SHELLY, }

LONDON :

ASH & Co., PRINTERS, 42, SOUTHWARK STREET, BOROUGH, S.E.

1896.

PRICE ONE SHILLING.



Digitized by the Internet Archive
in 2019 with funding from
Wellcome Library

<https://archive.org/details/b30593098>

INTRODUCTION TO A
DISCUSSION ON THE DIAGNOSIS BETWEEN RUBEOLA
AND SCARLET FEVER.

RUBEOLA has several other names; German measles, roetheln, rubella, epidemic rose rash. But I propose to adhere to the term Rubeola,* as that seems to be in general use. The disease is so named in Fagge's Principles and Practice of Medicine, and in the new System of Medicine, edited by Dr. Clifford Allbutt.

I apprehend that amongst those who are present this afternoon there will be no one who will deny the separate entity of this affection. Consequently I will not discuss this point, but will only say that its seasonal prevalence and age-incidence serve to separate it from measles and scarlet fever. I will also mention that four years ago I observed the occurrence within a short time of each other of, firstly, an outbreak of rubeola, and secondly, an outbreak of measles in the same ward at the Eastern Fever Hospital, and that four children convalescent from scarlet fever underwent attacks of rubeola and measles. The clinical histories of the three diseases, scarlet fever, rubeola, and measles, differ to such a degree, that the diagnosis is not difficult when one has under observation an epidemic consisting of many cases. But in one or two sporadic cases the diagnosis may be very difficult and indeed impossible. Under such conditions, however, it is harder to distinguish rubeola from a mild form of measles than from scarlet fever.

But to-day we are concerned only with scarlet fever and rubeola. Now, between well-marked examples of these diseases there can be no confusion. The real difficulty arises with mild cases of scarlet fever and cases of rubeola seen for the first time at a late stage. I will explain what I mean by relating the history of a case. Nurse C., aged 25 years, was seen by me at 6 p.m. on May 5th, 1892. She had been on duty all day, having had a slight headache since the

* Since this was written a new edition of the Nomenclature of Diseases has been published, in which the term Rubella has been adopted by the Royal College of Physicians.

previous night. She noticed a rash on her face an hour or so before I saw her. She had an eruption on her face and chest, consisting of faint pink spots. The glands were enlarged on the mastoid processes, but not elsewhere. The mucous membrane of the fauces was rather redder than usual. May 6th. The rash was more distinct in the morning; it occupied the face, trunk, and arms, but not the legs, except very slightly about the ankles. It consisted of faint spots and macules. No fresh glandular enlargement or faucial inflammation. P. 52. May 7th. The rash had now disappeared from the face, which was flushed. There was no circumoral pallor; the rash had appeared on the legs, feet, and soles, and in these regions was measly in character. On the neck, trunk, and upper extremities the spots had merged into a diffuse erythema which was punctate and exactly like that of scarlet fever. P. 68. The right tonsil was slightly swollen. May 8th. All that remained of the rash was a slight blush on trunk, arms, and legs, and macules on the feet. May 9th. Rash gone, very slight desquamation of nose and finger-tips. No further symptoms arose and no more desquamation took place. The temperature chart has been lost, but I recollect there was moderate pyrexia while the rash was coming out. Had I seen the patient for the first time on May 7th, I should, I think, without any hesitation, have pronounced her to be suffering from scarlet fever. The only point that could have given rise to hesitation would have been a very clear statement that a spotty rash had been present on the face. In a late stage, therefore, of rubeola, it may be impossible to distinguish it from scarlet fever.

If we compare the clinical characters of rubeola and the mild form of scarlet fever, there are points by paying careful attention to which help in diagnosis will be afforded. First of all as regards the *incubation period*; In rubeola this is usually over twelve days, whereas in scarlet fever it is always under a week. (Four days after the discussion, to which these remarks are an introduction, took place, I had under notice an instance where a careful attention to the

question of length of incubation period might have saved a blunder. On May 18th three patients were sent to the Eastern Hospital certified to be suffering from scarlet fever, a young woman, aged 19, and two boys aged ten and six. They came from the same house. Had I seen any one of these patients separately I should have hesitated as to the diagnosis. I should have said, not scarlet fever, but query whether rubeola or some non-infectious erythema. But taking the three cases together, they made a picture between them that was fairly typical of rubeola. Now, the young woman had been living in service from May 11th to May 17th in a different house from that from which she was removed. On May 17th she went to the house where the boys lived, and she had been living in this house from April 27th to May 11th, just before she went out to service. She returned to this house on the afternoon of May 17th, and she was quite positive that the rash had appeared in the morning, before she left her place of service. During the week, May 11th to 17th, she did not leave this place. The medical certificate was dated May 17th. Whatever the disease was, therefore, from which these patients were suffering, it was highly improbable that it was scarlet fever, for it would have been a curious coincidence if the young woman and the two boys had been infected at the same time in different places. Whereas, if the disease was rubeola, all three patients may easily have been infected from a common source during the early part of the fortnight, April 27th to May 11th).

There is usually no *prodromal period* in rubeola ; but when it is present the mastoid and posterior cervical, and sometimes all the superficial glands, are enlarged. Vomiting is not present, whereas this is a very constant symptom of the onset of scarlet fever. But as the rash may appear on the first day of scarlet fever and rubeola, little help is to be gained from the absence of prodromal symptoms.

The *rash* almost invariably—I think I may go so far as to say ‘invariably’ without the ‘almost’—commences on the face in rubeola. It then spreads to the chest and upper extremities, next to the rest of

the trunk, and lastly to the lower extremities, so that these regions are invaded in a fairly definite sequence. The skin round the mouth is affected. The duration is three days. The rash commences with small faint rose spots. On the face the spots usually die away without coalescing, and they may behave in the same way elsewhere. But often, as in the case of the nurse related above, on the trunk and limbs the spots merge into a diffuse erythema, which may be exactly like that of scarlet fever. I am not acquainted with any form of rubeola in which the rash is scarlatiniform from the commencement. There are cases in which the small pink spots coalesce to form larger spots and macules, more especially upon the trunk and limbs, but such cases give rise to no difficulty from the point of view of diagnosis from scarlet fever. Now in scarlet fever the rash is very rarely papular on the trunk, and not very often on the extremities; it never effects the face. It is exceedingly common to find the skin round the mouth and nostrils paler than the rest of the skin of the face. This circumoral pallor may be observed even when the cheeks are not flushed. It appears to be due to a constriction of the arterioles supplying this part of the skin. It is nearly always present in children, but less often in adults.

About the *tongue* there is nothing peculiar in rubeola, whereas in scarlet fever we look for peeling, or the "strawberry" appearance.

In rubeola it is rare to find much beyond slight swelling of the *tonsils* or the mucous membrane of the *palate*; so that any marked lesion of the fauces, together with a scarlatiniform rash is certainly scarlet fever. Within the last four days, however, I have had under my care a boy who, when admitted to the hospital, presented a well-marked spotty rash on the face, trunk and limbs—a typical rubeolous rash. But his cervical glands were very much more enlarged than is usual in rubeola, and on inspecting the throat, the tonsils were found to be enlarged and covered with a thick layer of pultaceous exudation. Bacteriological examination revealed the presence of diphtheria bacilli; so that I take it the boy is the subject of both rubeola and diphtheria.

In rubeola, the *eyes* are nearly always suffused ; sometimes there is marked injection of the conjunctival vessels. In scarlet fever the eyes are normal.

I have already mentioned that the *glands* may be found enlarged before the outcome of the rash in rubeola. The glands affected may be the mastoid, posterior cervical, axillary, inguinal, and a gland just above the internal condyle at the elbow. But while it is common to get some or all of these glands enlarged in rubeola, one occasionally but certainly meets with cases in which there is no glandular enlargement whatever. Moreover, these glands may be affected in measles, and, less frequently, in scarlet fever, even in mild cases. The glands have been described as being moderately enlarged, hard, and slightly tender in rubeola. But this very condition is occasionally met with in measles and scarlet fever. Hence I am not accustomed to lay much stress on the presence or character of glandular enlargement.

From a consideration of the *temperature* and *general symptoms* little, if any, indication of the nature of the disease is to be obtained. In rubeola the temperature may be up to 104° or 105° F. without the patient being any the worse.

It comes to this, therefore, that in the diagnosis between rubeola and mild cases of scarlet fever during the eruptive stage, we have chiefly to rely upon the character and distribution of the rash, including the circumoral ring ; less helpful, because less constant, are the condition of the tongue, glands, temperature and pulse.

Of the period of convalescence the most striking and constant phenomenon in scarlet fever is *desquamation*. This begins within three weeks from the rash. It is present even when the rash has been slight and ill-marked. It commences nearly always in minute white elevations, like miliaria ; the tops of the elevations are rubbed off and broken and an appearance of small rings is produced. By a further separation of the superficial epithelial cells these rings enlarge and coalesce to form irregular figures. Where the skin is thick this

ringed desquamation may not be observed. The only patients in whom desquamation is wanting or very ill-defined are infants. In rubeola the desquamation is never profuse nor ringed. It is a fine branny desquamation, though occasionally from the fingers and toes large and thin flakes of epithelium may be shed, as may happen, indeed, in almost any febrile disease.

There are practically no *sequelæ* of rubeolæ. So that the occurrence of nephritis, otitis, adenitis, etc., during the period of convalescence is conclusive of scarlet fever.

A doubtful case of scarlet fever or rubeola should be isolated for three weeks to see whether peeling or any *sequelæ* occur. In scarlet fever the patient is probably not free from infection under six weeks from the onset of the illness. In rubeola he may be allowed to go amongst other persons at the end of ten days from the rash.

