ON POINTS OF AFFINITY BETWEEN RHEUMATOID ARTHRITIS, LOCOMOTOR ATAXY, AND EXOPHTHALMIC GOITRE.

In actual practice we soon discover that Nature does not provide abrupt classifications and symmetric groupings. Thus, the phenomena of locomotor ataxy depend upon distinct internal lesions, and the phenomena of goitre (whether there be exopthalmos or not) are associated with distinct external lesions. Now, some of the same phenomena are also found in a large number of cases of rheumatoid arthritis. The three diseases overlap each other, so to speak, at several points. Does not this go to prove that there is an arthritis which is essentially neutral, apart from all diathetic contamination? These curious facts have a wide significance, and are of much interest to workers in the comparatively untilled ground of rheumatoid arthritis. If it be true, as Dr. Todd said, that a knowledge of gout is a passport to all humoral medicine, it is possible that a knowledge of rheumatoid arthritis will provide a key which will open many secret avenues of neural medicine.

Pigmentation of Skin.—I believe that I may fairly claim priority in observing and recording some *differentiæ* of rheumatoid arthritis during its early stage. These differential symptoms are striking and obtrusive. They belong to no other group of the large family of arthritis. Many rheumatoid people, belonging mostly to an age between 50 and 65, possess neither the distinction nor the energy to display nerve disturbances; but nearly every case of undoubted rheumatoid arthritis in early or middle life shows marks of cerebro-spinal sympathy in one or more ways. Look for pigment; feel the hands for cold sweats; examine the heart for quick beating and often high tension; and ask whether there be severe or paroxysmal neuralgia. The probability is great that you will catch at least one of these connotative signs. Assuming, then, that there is before you a neural arthritis with a yellow or melasmic bronzing of some part of the body usually sheltered from light, the judgment may at first lean to disease of the adrenal glands. Only for a moment need we dwell upon this, or upon the bare possibility of arsenical poisoning. To Dr. David Drummond, of Newcastle-on-Tyne, we are indebted for a record of the fact that pigmentation, like that which is associated with tuberculous disease of the adrenal glands, is a frequent accompaniment of exopthalmic goitre. The favorite situations of the discoloration are around the prominent eyeballs; on the face generally; neck, armpits, and areola of nipples; abdomen, and inner part of both thighs. The patches are sometimes clearly defined, but often they fade imperceptibly into normally colored skin. Wherever the pigment occurs naturally, there it is found increased; and the color varies from a pale yellow to a deep brown.

Very likely these are those disturbances in the chromatogenous function of the skin which I have described as a common feature of rheumatoid arthritis. The pigment patches are more or less large; their hues are infinitely varied, and they are seen on many parts of the body. Across the forehead there may be a light bronze smear. Beneath the lower eyelids the streak is sometimes very dark, and shines with metallic lustre. The dominant tints on the face are lemon and orange and citron. Occasionally the neck looks as if it had been soaked in a walnut dye; and in one case the complexion of the face resembled that of a mulatto, and it was partially covered with a brown seborrhœa. The arms and hands are often severely pigmented.

Trousseau called attention to leucodermia as a feature of exophthalmic goitre; and in three cases of rheumatoid arthritis I have seen round white patches of skin on the front of the forearm. The pigment of arthritis assumes many forms, one of the most common being yellow spots or freckles; but these are, I believe, never seen in exophthalmic goitre. Further, a larger number of goitrous cases are complicated with discolorment of skin than cases strictly rheumatoidal.

Tachycardia.—In exophthalmic goitre the disturbance of the heart's action may exist for months before any other symptom.

My original observation on the quicknes of pulse which characterizes so many cases of early rheumatoid arthritis has been confirmed by distinguished physicians—Sir Dyce Duckworth, Dr. Samson, Dr. Archibald Garrod, and Dr. Pye-Smith. This form of tachycardia is not at all uncommon; certainly in every urban hospital or infirmary a case must exist now and then, and would be easily found if looked for. How is it interpreted? Is the subject of it called irritable or excitable, or is the tachycardia ascribed to old and forgotten myocarditis? What explanation is given in the official lecture room? Last November we took a kind of census of this symptom at our Mineral Water Hospital, in order to test the numerical severity of the cases of tachycardia then in the house and under my care. Of fifty-four patients occupying my beds, eighteen were unquestionable examples of rheumatoid arthritis, and nine (eight females and one male) had more or less quickness of pulse (average pulse not below 90). Now concerning the nine people above mentioned: the mean age was a trifle more than 42; four of the women were married and had children, and four were single; and the average rate of the pulse (taken in the sitting position) was 104. I have never found a material difference whether the patients were lying or standing, or after mod-