ON THE
PROPORTION OF RED CORPUSCLES IN
THE BLOOD

IN
SOME SKIN DISEASES.

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THE enumerations of the proportion of red corpuscles in the blood recorded in this paper were made by the method and instruments recommended by M. Malassez, of Paris. In order to obtain a basis for comparison, the blood of healthy adult persons and of persons suffering from exhausting diseases was examined with the following results:

1. *Healthy persons.*

MALES.	Red corpuscles per millimeter cube.
Butcher's assistant, æt. 22 . . .	4,760,000
Greengrocer's assistant, æt. 28 . . .	4,700,000
Baker's assistant, æt. 22 . . .	4,600,000
Physician, æt. 26 . . .	4,400,000

FEMALES.				Red corpuscles per millimeter cube.
Domestic servant, æt. 29	.	.	.	3,880,000
„ „ æt. 31	.	.	.	4,690,000
„ „ æt. 24	.	.	.	4,260,000
„ „ æt. 19	.	.	.	4,020,000
Girl, æt. 13	.	.	.	3,940,000
Married woman, æt. 25	.	.	.	4,210,000

II. *Persons suffering from exhausting diseases.*

Man, æt. 58, with obstruction of the œsophagus	3,500,000
Young woman, very markedly anæmic	3,110,000
Man, æt. 29, in advanced phthisis ¹	2,160,000

The numbers given in the Table appended to this paper were found in persons affected with skin diseases, the cases being selected from patients in whom the condition of the blood was not changed by the coexistence of other morbid conditions, or by the exhibition of drugs.

An examination of the results obtained in the six cases of eczema shows that in only one of them (an old man, æt. 60) was the number of corpuscles below the average, whilst in two the number was unusually high. The cases were selected as being likely to test whether a diminution of the red corpuscles is associated with eczema, embracing, as they do, instances in which the disease was recent and spontaneous, and others in which it was chronic and inveterate.

On reviewing the facts as a whole it will be seen

¹ These figures are in general accordance with those published by M. Malassez in the *Comptes Rendus de la Société de Biologie* for 1874, and in the *Bulletins de la Société Anatomique de Paris* for 1874. According to M. Malassez's observations 4,000,000 is a low number, and anything over 5,000,000 a high number for a healthy adult man. In females the proportion is less than in males. In his observations on persons suffering from cancer the maxima numbers in men are 3,800,000, the minima 2,500,000; in women, maxima 3,080,000, minima 2,560,000. In phthisis, his maxima numbers for men are 4,480,000, minima 2,560,000; for women, maxima 3,900,000, minima 980,000.

that the only cases of skin disease in which the corpuscular element of the blood was found deficient were a case of chronic pemphigus and a case of prurigo. On the other hand it is clear that psoriasis, eczema, and leprosy develop in persons in whom the number of corpuscles is normal. This is especially noteworthy as regards eczema, a disease in which theoretical notions regarding the blood have influenced treatment to a considerable extent.

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Sex.	Age.	Disease.	No. of red blood-corpuscles per millimeter cube.	Remarks.
M.	25	Psoriasis	5,250,000	Nummular form thickly scattered over trunk and limbs. Had had several previous attacks.
M.	25	Psoriasis	4,820,000	Frequent attacks during the previous 15 years.
F.	27	Psoriasis	4,330,000	Eruption copious. Suckling her infant.
F.	18	Psoriasis	4,448,000	Ps. guttata. First attack.
M.	60	Eczema	3,750,000	Universal chronic eczema for 4 years. Became worse during the previous six months. Had had a severe attack of eczema at the age of 25.
M.	19	Eczema	4,200,000	Universal chronic eczema lasting 8 years. The epidermis desquamating copiously from a congested cutis over nearly the whole body.
F.	12	Eczema	4,420,000	Scaling eczema of arms, and eczema rimosum of lips. Had had previous attacks.
F.	26	Eczema	4,350,000	Dry eczema of scalp, flexures of arms, and on several parts of the trunk.
F.	20	Eczema	3,880,000	Impetiginous eczema of the cheeks and neck.
F.	25	Eczema	5,050,000	Acute eczema of the whole skin of both hands and wrists. Second attack within a month.
M.	30—40	Pemphigus	3,580,000	Chronic.

F.	16	Acne Sebacea	4,050,000	Very numerous colourless papules on forehead, cheeks, and chin, each papule filled with a sebaceous plug. No inflammatory base.
M.	13	Prurigo (Hebra)*	3,420,000, after interval of 1 month's treatment 3,550,000	The disease began in infancy, and had continued without intermission.
M.	47	Acne Rosacea	4,140,000	Second stage of the malady. Skin on nose and cheeks much thickened. The patient had been long in a semi-tropical climate.
M.	17	Leprosy (anæsthetic)	4,320,000 4,470,000 4,170,000 4,830,000	On March 1st, 1877. On March 26th, 1877. On April 1st, 1877. On May 26th, 1877. During this period the patient was taking iron. There was no improvement in the disease. The proportion of white corpuscles to red was valued once, and found to be 1 to 50. The disease was not in an advanced stage.

* As this disease is hardly recognised out of German-speaking countries, and as the term prurigo is often applied in England to affections of a totally different nature to that alluded to here, it is necessary to state that this patient's malady is a well-defined example of the affection described by Hebra. During the twelve months that the patient has been under the author's observation the behaviour of the eruption under treatment has been the usual one—speedy alleviation and constantly recurring relapses. The boy was born in Australia. In a younger brother, aged seven, also born in Australia, and subjected to the same hygienic influences, the number of the red corpuscles was 3,970,000.