

The JAMA Network Revisited

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Peculiar Elongated and Sickle-Shaped Red Blood Corpuscles in a Case of Severe Anemia

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This case is reported because of the unusual blood findings, no duplicate of which I have ever seen described....

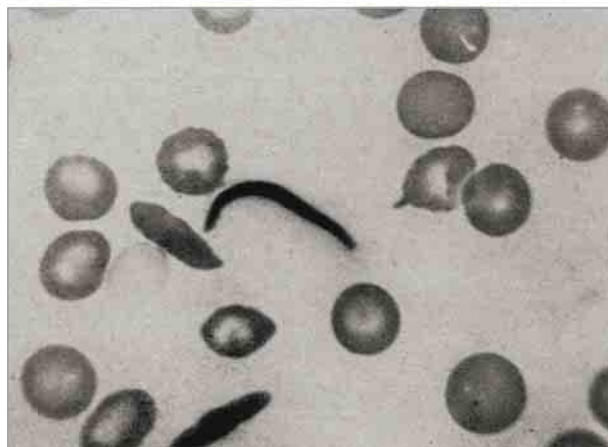
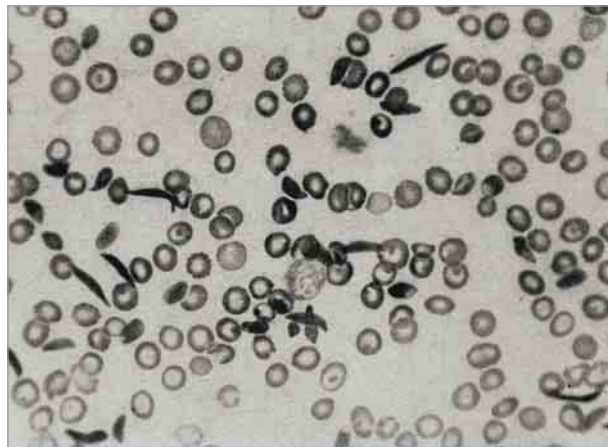
Blood Examination.—The blood-count on Dec. 26, 1904, was: Red corpuscles, 2,570,000; white corpuscles, 40,000; hemoglobin (Dare) 40 per cent. color index, 0.78. December 31 the count was as follows:

Erythrocytes, 2,880,000.

Leukocytes, 15,250.

Hemoglobin, 50 per cent. (Dare).

The red corpuscles varied much in size, many microcytes being seen and some macrocytes. Polychromatophilia was present. Nucleated reds were numerous, 74 being seen in a count of 200 leukocytes, there being about 5,000 to the c.mm. The shape of the reds was very irregular, but what especially attracted attention was the large number of thin, elongated, sickle-shaped and crescent-shaped forms. These were seen in fresh specimens, no matter in what way the blood was spread on the slide and they were seen also in specimens fixed by heat, by alcohol and ether, and stained with the Ehrlich triacid stain as well as with control stains. They were not seen in specimens of blood taken at the same time from other individuals and prepared under exactly similar conditions. They were surely not artefacts, nor were they any form of parasite. In staining reactions they were exactly like their neighbors, the ordinary red corpuscles, though many took the stain heavily. In a few of the elongated forms a nucleus was seen. In the fresh specimen where there was a slight current in the blood before it had become entirely quiet, all of the red corpuscles, the elongated forms as well as those of ordinary form, seemed to be unusually pliable and flexible, bending and twisting in a remarkable manner as they bumped against each other or crowded through a narrow space and seeming almost rubber-like in their elastic resumption of the former shape....



These microphotographs show the peculiar elongated forms of the red corpuscles. Occasional shadow forms are seen with a few nucleated reds....The relatively large number of white corpuscles and of normoblasts is not shown by these particular fields.

No conclusions can be drawn from this case. Not even a definite diagnosis can be made....

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Editor's Note: The JAMA Network Revisited is transcribed verbatim from articles published previously, unless otherwise noted.

Section Editor: Jennifer Reiling, Assistant Editor.