

average was about 7 hours. The M. A. B. cases showed a considerable prolongation (9 hours); with progression of the disease the blister time was progressively shortened.

The changes in the blister time would indicate a moderate increase in sympathetic tonus of the skin during the M. A. A. stages which, however, gives way to a parasympathetic overbalance with progress of the disease. There is evidently a distinct increase in capillary permeability with increased activity of the tuberculous process. Exudative cases in general have capillaries that are considerably more permeable than the normal.

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<sup>1</sup> Petersen, W. F., and Willis, D. A., *Arch. Int. Med.*, 1926, xxxviii, 663.

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#### The Precipitin Content on the Protein Fractions of Immune Serum.

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(Introduced by William H. Welker.)

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Rabbits were immunized against crystallized egg albumin. The antiserum produced was separated into the protein fractions, euglobulin, pseudoglobulin, and albumin by 33 per cent, 46 per cent, 64 per cent, and 100 per cent saturation with  $(\text{NH}_4)_2\text{SO}_4$ . A precipitin test by the contact method was made on the whole serum and on each protein fraction, in an effort to discover with which fraction the precipitin came down. In all 10 cases the whole serum gave a positive test, with precipitin titers ranging from 100,000 in 2 cases to 10,000,000 in 1 case. The precipitin was carried down with the euglobulin fraction, but during dialysis the pseudoglobulin was split off by hydrolysis and the precipitin remained in this water soluble fraction. The albumin fractions were found free of precipitins in all cases. The precipitin titer was less in the globulin fraction containing the precipitin than in the whole serum, calculated on the basis of equivalent globulin content.