

MEDICAL GRAND ROUNDS  
October 10, 1957

Protein Abnormalities in Multiple Myeloma and Allied States

Case #1 -- [REDACTED]

This 59 year old colored male was admitted to [REDACTED] for the first time on [REDACTED]-57. He had had low back pain for 9 months, and 5 months before admission he had lower thoracic cage soreness and "rheumatic" aching of shoulders. Two months before admission he noted a "caving in" of his upper chest. Physical examination revealed cachexia, marked stiffness of spine, deep depression of the upper sternum, tenderness over ribs with some crepitus over right anterior chest wall. Laboratory: Hgb - 8.1 gms%, WBC - 9,100 with normal differential, Urine showed 3+ albuminuria. Agglutinations for Typh. H & O, Brucella, Tularemia, Paratyphoid A & B, Proteus OX-19 were Negative, Tuberculin 1/100 positive, BUN - 26. Total protein - 7 gms, Albumin - 4.3, Globulin - 2.7, Calcium - 11.7, Phosphorus - 6.0, Alkaline phosphatase - 5.5, Bence-Jones - Neg., Blood type - A, Antibodies - 1:128. Electrophoresis: abnormal protein in B-globulin zone. Bone marrow loaded with plasma cells. X-rays - disseminated osteolytic lesions. Treated with P-32 (5 millicuries).

Case #2 [REDACTED] This 44 year old colored female was admitted [REDACTED]-57. Two months prior to admission she began to have shortness of breath, palpitation, easy fatiguability. Physical examination revealed a temperature of 101.8°F., findings suggestive of congestive heart failure, and a liver edge palpable 4 finger breadths below the costal margin. Laboratory data: Hgb - 5.6 gm%, ESR - 30 mm/hr, WBC - 7,400 with normal differential, Urinalysis negative, Bence-Jones negative, Agglutinations for Typhoid, Brucella, Tularemia negative. BUN - 22; Total protein - 8.5 gm% with 3.0 gm% Albumin and 5.5 gm% Globulin. Calcium - 10.6 mgm%, Phosphorus - 3.9 mgm%, Blood type - A. Electrophoresis showed abnormal B-globulin peak (62%). Bone marrow revealed plasma cytolysis. Bone x-ray survey negative.

Case #3 -- [REDACTED]

This 66 year old colored female was admitted to [REDACTED] on [REDACTED]-57. She had had known multiple myeloma for several years. Six weeks before admission she fell and fractured her right hip. Laboratory data: Hgb - 7.3 gm%, WBC - 10,900, Urinalysis negative, Bence-Jones protein negative, Total protein 7.4, Albumin - 3.2, Globulin - 4.2, Calcium - 14.6 mgm%. Coombes test positive. X-rays revealed disseminated osteolytic lesions. Bone marrow showed plasma cytolysis. Electrophoresis showed gamma globulin abnormality (44%). Cryoglobulin negative. Treated with 2.5 mc P-32; became gradually stuporous and quietly expired. Her serum calcium reached a height of 16.5 mgm% but fell to 9.1 mgm% prior to death.

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