

#144

INTERNATIONAL ACADEMY OF PATHOLOGY

SEMINAR ON NON NEOPLASTIC DISEASES OF BONE

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Zurich, Switzerland
July 10, 1962

N.B. The accompanying sections are submitted in plastic platelets.
For mounting the plastic platelets, please dip them 2 times quickly in Xylo1 and then once quickly in Canada balsalm; then place the platelet-tissue face up on a slide with a generous amount of Canada balsalm and cover with a cover slip. Label the slides

SEMINAR ON NON NEOPLASTIC DISEASE OF BONE

Meeting on July 10, 1962

- Hyperproteinemia*
- Case 1. 68 year old male. Generalized arteriosclerosis. Bone pains, albuminuria. Progressive renal insufficiency (poor concentration). Chronic hypercalcaemia. Cause of death: myocardial infarction and bleeding gastric ulcer. Specimen: vertebrae. ✓
- Case 2. Male age 62 with history of pain in both knees and nocturia for 3 years. Urine contained many red and white blood cells. X-rays revealed osteolytic lesions of the femur, ilium, skull and ribs. Serum calcium 11.2 mgm %; alkaline phosphatase 14 Bodansky units; non protein nitrogen 135 to 200 mgm %. At operation all 4 parathyroid glands were enlarged. The right upper and lower glands were removed in toto; one-half of the left upper and two-thirds of the left lower glands were also removed and it was estimated that 80 milligrams of parathyroid tissue remained. Postoperatively the serum calcium was 10.4, phosphorus 3.4, and the non protein nitrogen 90 mgm %. He was admitted 10 months later following a fall with a fracture of the right clavicle, right hip and pubis. The serum calcium was 9.6; phosphorus 3.3; and alkaline phosphatase 12. Non protein nitrogen was 120. The latter rose to 170 and following several generalized seizures he died. Specimen: vertebrae.
- Hyperproteinemia*
- Case 3. 57 year old female. Albuminuria, oedema, uremia. Blood-urea: 560 mg, Hb 5.9 gm%. Specimen: vertebrae. ✓
- Case 4. 59 year old female. Schizophrenia. Progressive stiffening of the joints. Severe kyphoscoliosis, bone pains. Cedema of legs. Hyperproteinemia 6.3%, serum calcium 7.5 mg%, alkaline phosphatase 16.3 Bod. units. Urin: Sulkovitch negative. Cause of death: Heart failure. Specimen: ribs. ✓
- Case 5. 75 year old male. Polyarthrititis, particularly hand and foot joints. Terminal cavitating pulmonary tuberculosis and uremia. Uric acid 6.5 mg%. Specimen, small finger joint. ✓
- Case 6. 11 year old boy. Four years before death haematuria. Renal and ureter calculi. 1959 and 1961 recurrent calculi. Final admission: albuminuria, Sulkovitch positive. Blood urea elevated. Anemia 7.4 gm%. Specimen, ribs.
- Case 7. 72 year old female. Three thyroidectomies. Anemia at 58 years, Hb 70%. Leucocytes 7000, relapsing fever. At 60 years blood count: myeloblasts.

myelocytes and erythroblasts. Splenomegalia. At 70 years: progressive anemia, spleen extending to small pelvis. Blood count: leucocytes 7200, therefrom myeloblasts 140, myelocytes 2250. Generalized osteosclerosis.
Specimen: Tarsal bone.

Case 8. 55 year old female. Metastasizing breast carcinoma. Hypoproteinemia 4,5 gm%, hypocalcemia 7,4 mg%. Final admission: tumor in the left upper lobe of the lung. Heart failure, clubbing of fingers.
Specimen: Metatarsal bone.

Case 9. Adult male, autopsy findings: irregular thickening of the tibia with ossifying periostitis. No further information available.
Specimen: distal end of tibia.

Case 10. 22 year old male. Pains in the left calf following distortion. X ray: irregular thickening of the entire fibula. Excision of the fibula.
Specimen: fibula.

Case 11. 11 year old girl. At two years brown pigmented spots. At four years irregular menstruation, enlarged breast glands. Progressive fracture deformities of the legs. Waddling gait. Spinal collapse. Calcium balance normal. At 11 years: symptoms of hyperthyroidism.
Specimen: long bone.

Case 12. 44 year old male. Backache, progressive gibbus formation with spinal cord compression. X rays: wedge shaped vertebra th. 11. Discs preserved. Curettage.
Specimen: vertebrae.

Case 13. 12 year old boy. Pains in the left shoulder during two months. X rays: ovoid bean-sized defect without perifocal sclerosis in the proximal humerus metaphysis. No fever. Curettage.
Specimen: humerus, prox. metaphysis.

Case 14. Adult male. Chronic infectious disease with fever and splenomegalia.
Specimen: vertebrae.

Case 15. 3 year old boy with 1½ years progressive soft tissue swelling above the left eye. Progressive exophthalmus. Radiotherapy ineffective. X rays: large skull defects and multiple osteolytic skeletal lesions. Total cholesterol 256 mg%, free cholesterol 72 mg%, bound cholesterol 72%.
Specimen: femur.

Complete specimens → hand table → name L.S.

Separated from Arthur Snow's Diseases

Case 16. Newborn, female. Shortened limbs with multiple fractures. No family history of bone disease.
Specimen: long bone.

5 } polyostitic
6 } fibrous dysplasia
7 Hyaline

SEMINAR ON BONE DISEASES

A. Diagnoses

- ✓ 1. Hyperparathyreoidism: Osteodystrophia fibrosa generalisata Recklinghausen.
- ✓ 2. Probable combination of primary and secondary Hyperparathyreoidism.
- ✓ 3. Sec. Hyperparathyreoidism (Renal Osteodystrophy and renal Osteomalacia).
- ✓ 4. Looser-Milkman Syndrome (Osteomalacia).
- ✓ 5. Gouty arthritis.
- ✓ 6. Oxalosis.
- ✓ 7. Osteomyelosclerosis.
- ✓ 8. Periostitis ossificans (Osteoarthropathie hypertrophiante pneumique Pierre Marie).
- ✓ 9. Syphilitic ^{NO SLIDE} ostitis and periostitis. *BA Rahn*
- ✓ 10. Monostic fibrous dysplasia.
- ✓ 11. Polyostic fibrous dysplasia (Albright Disease).
- ✓ 12. Alveolar Echinococcus of bone (vertebra) with spontaneous fracture.
- ✓ 13. Plasmacellular osteomyelitis.
- ✓ 14. Bruceliotic spondylitis (Morbus Bang) *upper tibia and fibula young people.*
- ✓ 15. Hand-Schueller-Christian disease.
- ✓ 16. Osteogenesis imperfecta Vrolik. (1849) *early form show fractures*

B. References to the Bone Seminar.

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