Case 9

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Clinical Abstract:

This 74 year old gentleman had an anterior resection for adenocarcinoma of the rectum in February 1979, following which he had persistent perianal pain and left sacral metastases. He was treated with local radiotherapy (5,000 rads) and was re-admitted with recurrence of pain in January 1981 for which he was treated with a course of 5-fluorouracil. Recurrence of pain in the left thigh July 1981 led to re-admission to hospital, which demonstrated a normal neurologic examination, apart from diminished vibration and position in sense in the feet. In August 1981 he was treated with CSF barbotage via lumbar puncture. 10-20 cc's of CSF was withdrawn and re-injected over 10 sec, and repeated 3 times. Within 2 to 3 hours the patient began shaking violently and showed rigor, vomiting and fever. By evening he was responding to pain and was moving his limbs spontaneously. A lumbar puncture yielded a cloudy cerebrospinal fluid with 1508 white blood cell per cu mm (93% polys). There were 416 red blood cells, glucose 21 mg/dl and protein 990 mg/dl. Gram stains revealed no organisms and culture was negative. He was started on chlorophenicol and ampicillin. By the following morning he responded to his name with visual localization but was mute. His neck was stiff and he showed a coarse tremor in all limbs. He demonstrated continual sporadic myoclonic-like twitchings of the chest, neck and arm. By afternoon he was afebrile and had no rigors but showed persistent myoclonic twitchings. EEG showed bilateral beta and delta wave dysrhythmia plus a frontal predominance of single spikes accompanying the myoclonic jerks. CT scan of the head was normal. Two days after the barbotage the patient was aware and communicative with no myoclonic jerks, 5 days after barbotage the LP yielded clear xanthochromic fluid with 15 white blood cells and 57 red blood cells per cu mm and with a protein of 318 mg/dl. His perianal pain returned 8 days after barbotage and 16 days after barbotage he was discharged with no residua. He was admitted a month later in renal failure and died 6 weeks after barbotage.

Material Submitted: 1 H & E stained section of spinal cord
1 2 X 2 color micrograph of LFB/H&E of Anterior Horn

Points for Discussion: Diagnosis
Nature of changes seen