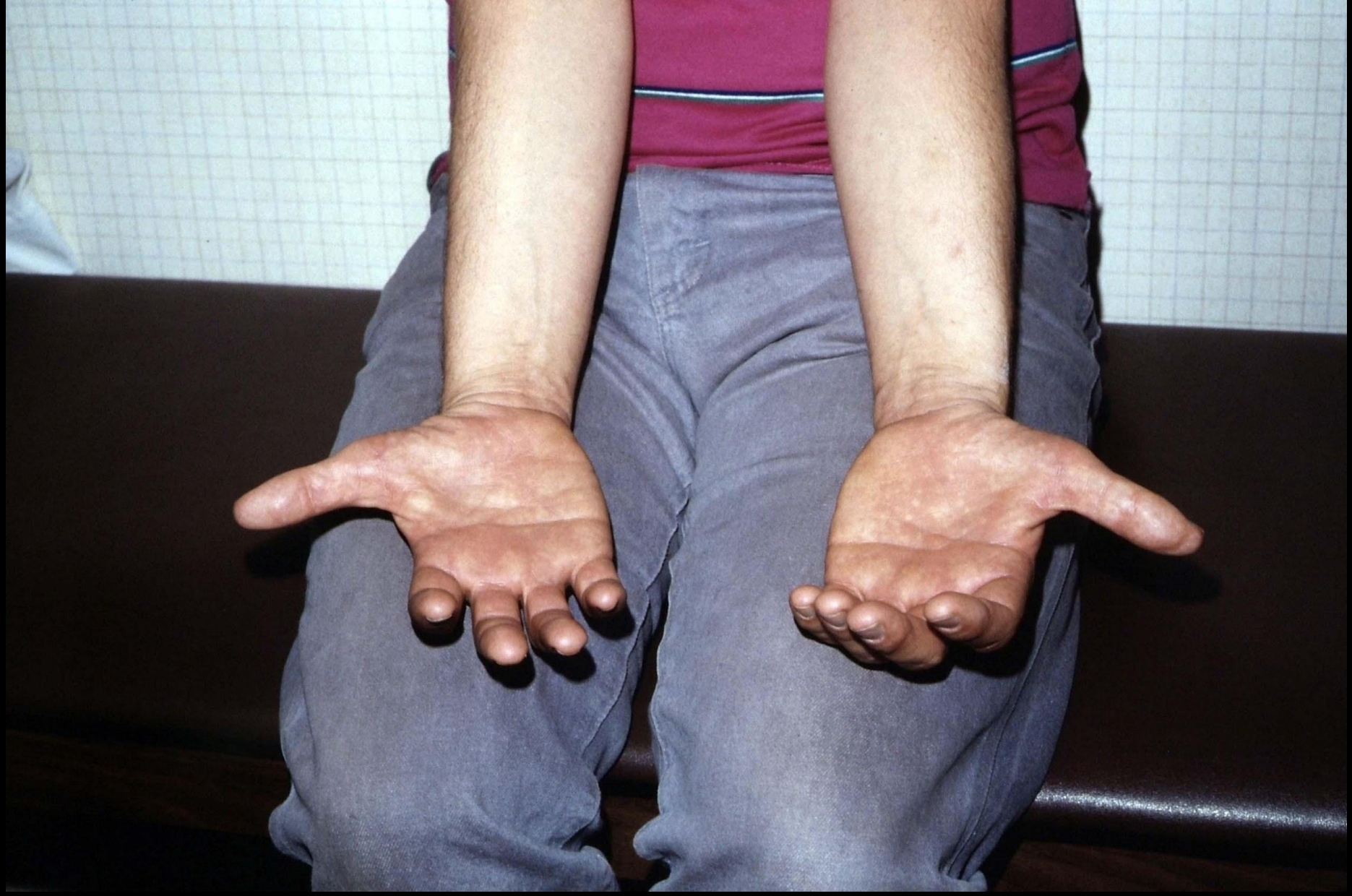
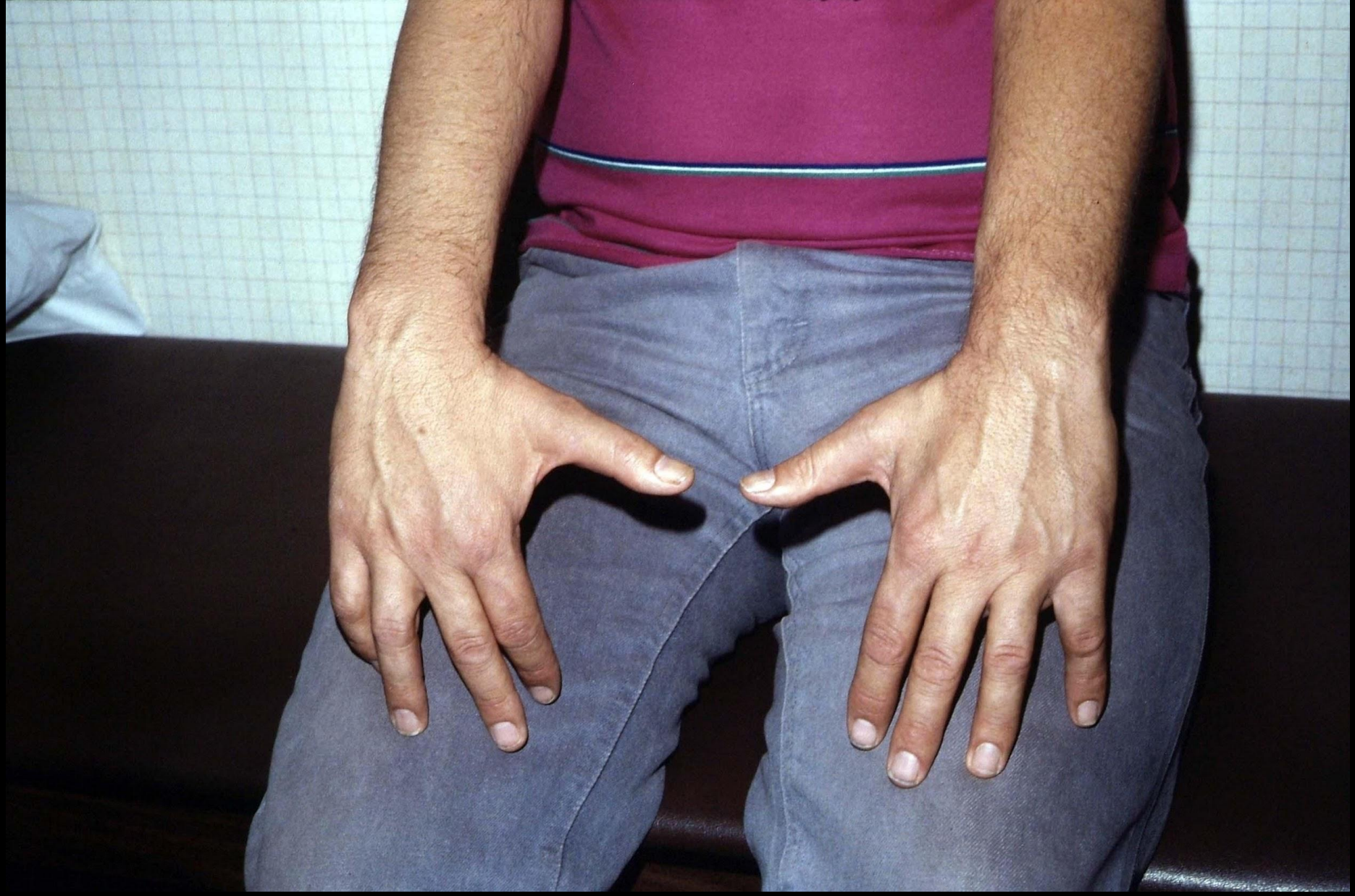


Motor Neuron Disease:
Progressive Muscular Atrophy (PMA) Type
(LMN Atrophy and Weakness)



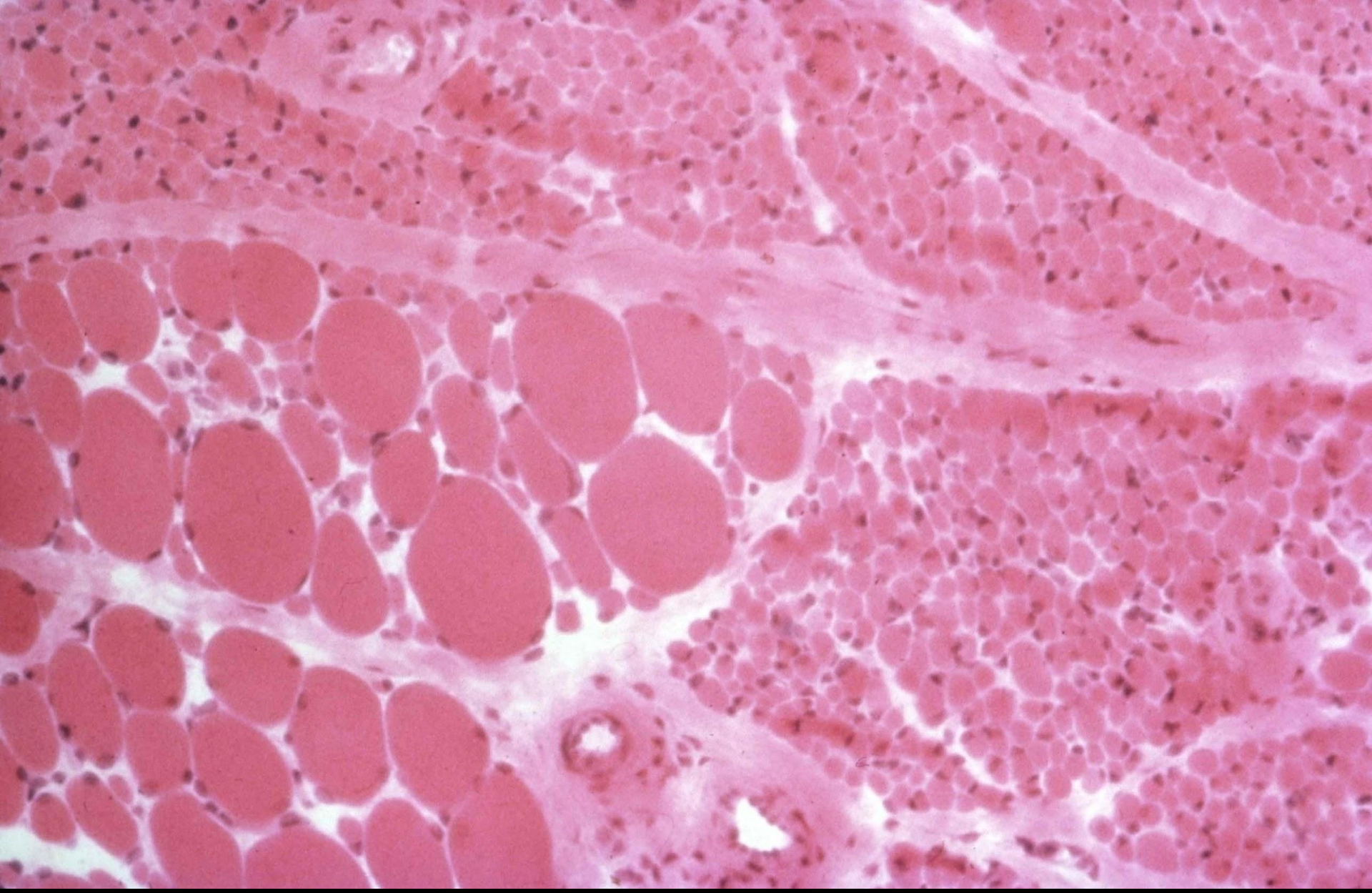
Motor Neuron Disease:
Progressive Muscular Atrophy (PMA) Type
(LMN Atrophy and Weakness)

Laboratory and Electrophysiological Evaluation I

- Lead and other heavy metal toxic neuropathies were extensively studied and eliminated.
- NCS ruled out multifocal motor neuropathy with conduction block and other forms of motor neuropathies.
- EMG of the upper limbs showed signs of patchy, multifocal LMN lesions (fibrillations, positive sharp waves, fasciculations) involving the weak muscle groups consistent with the diagnosis of the PMA form of MND.

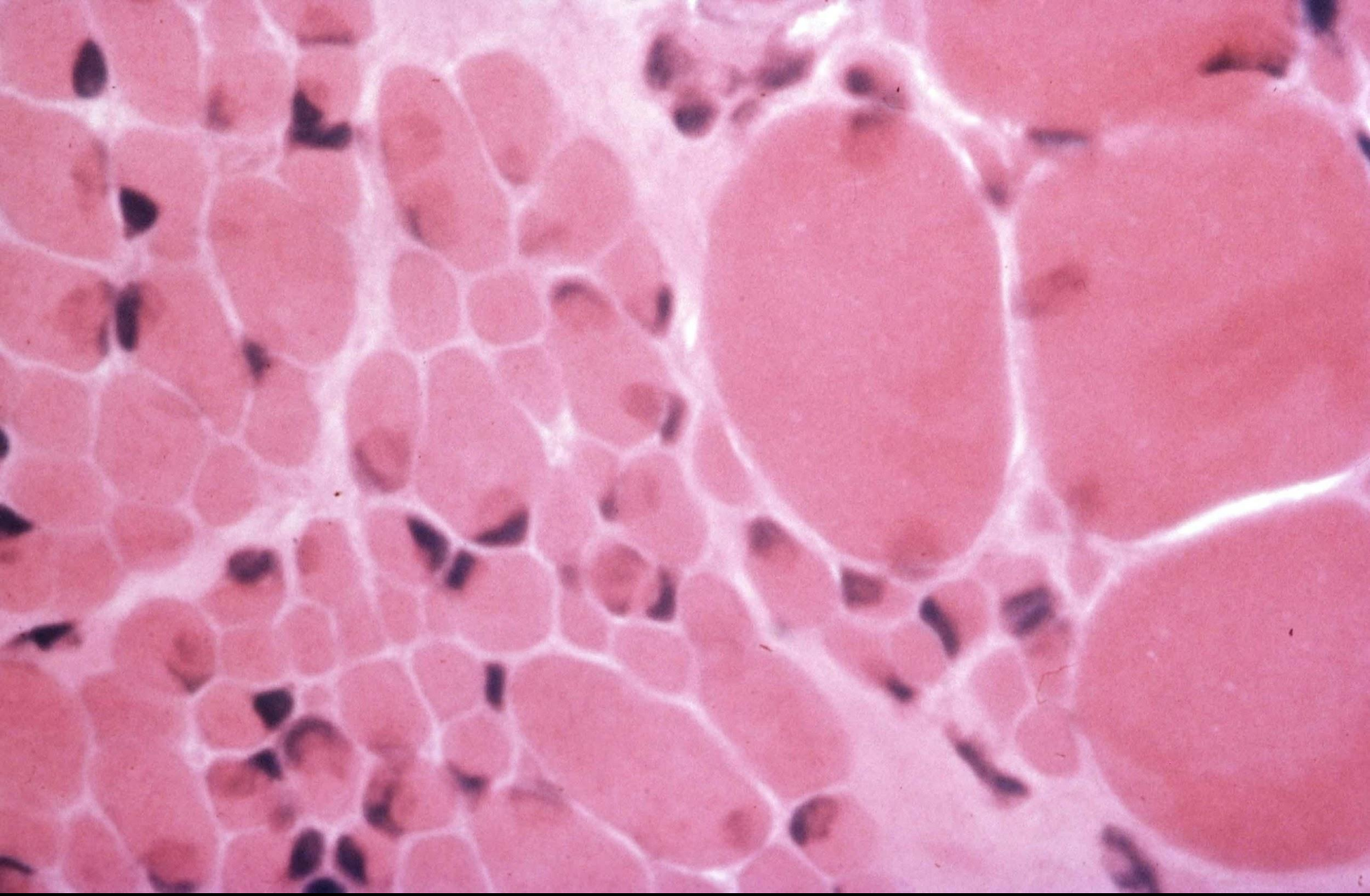
Laboratory and Electrophysiological Evaluation II

- Muscle biopsy showed typical findings of denervation or neurogenic atrophy (fiber type grouping and atrophy with small angulated fibers and clusters of sarcolemmal nuclei). There were no signs of inflammation, inclusion bodies, or muscle fiber necrosis.



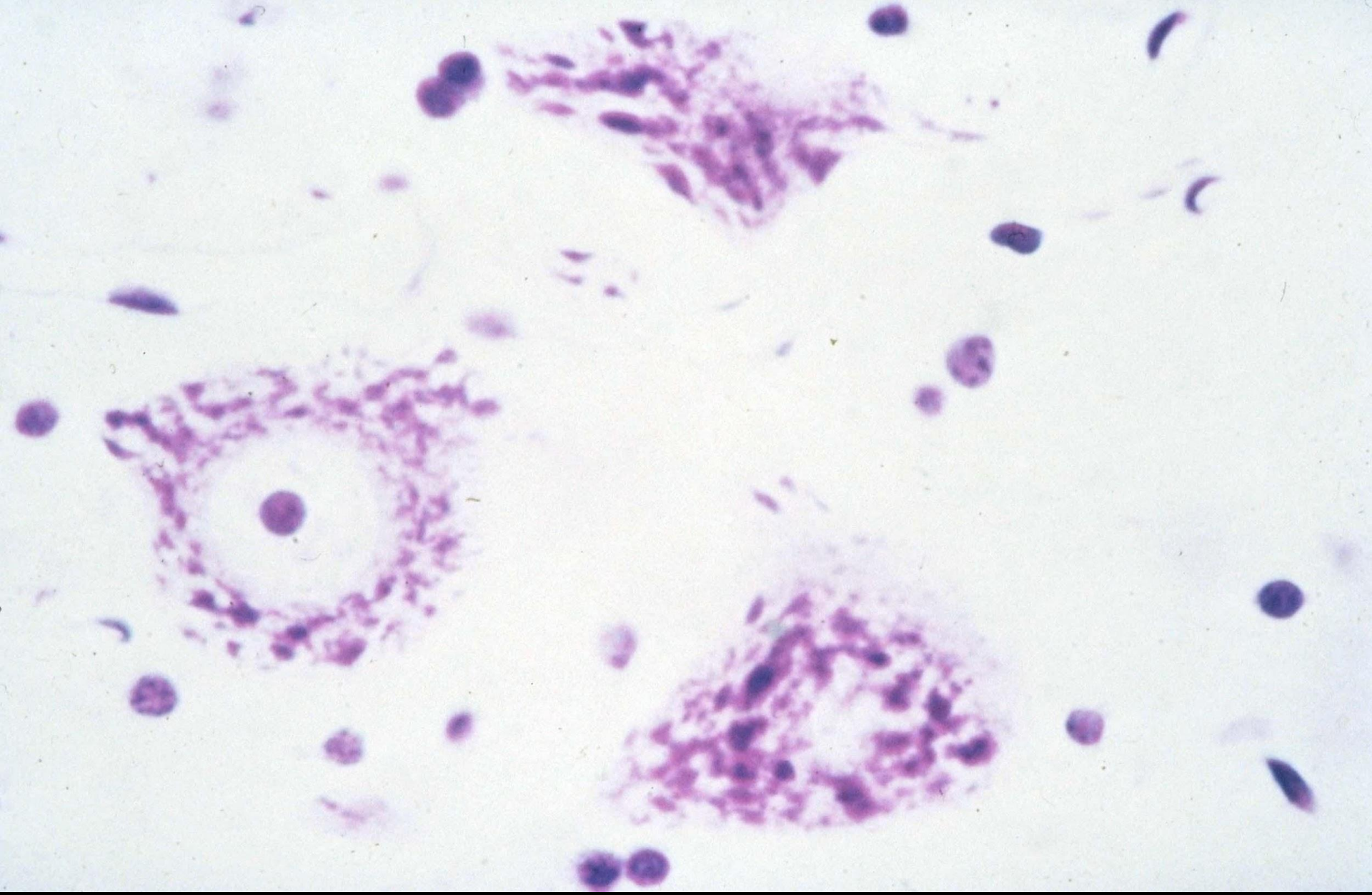
Motor Neuron Disease: PMA Type
(Neurogenic Fiber Group Atrophy)
(Skeletal Muscle Biopsy: Lower Magnification)

H & E



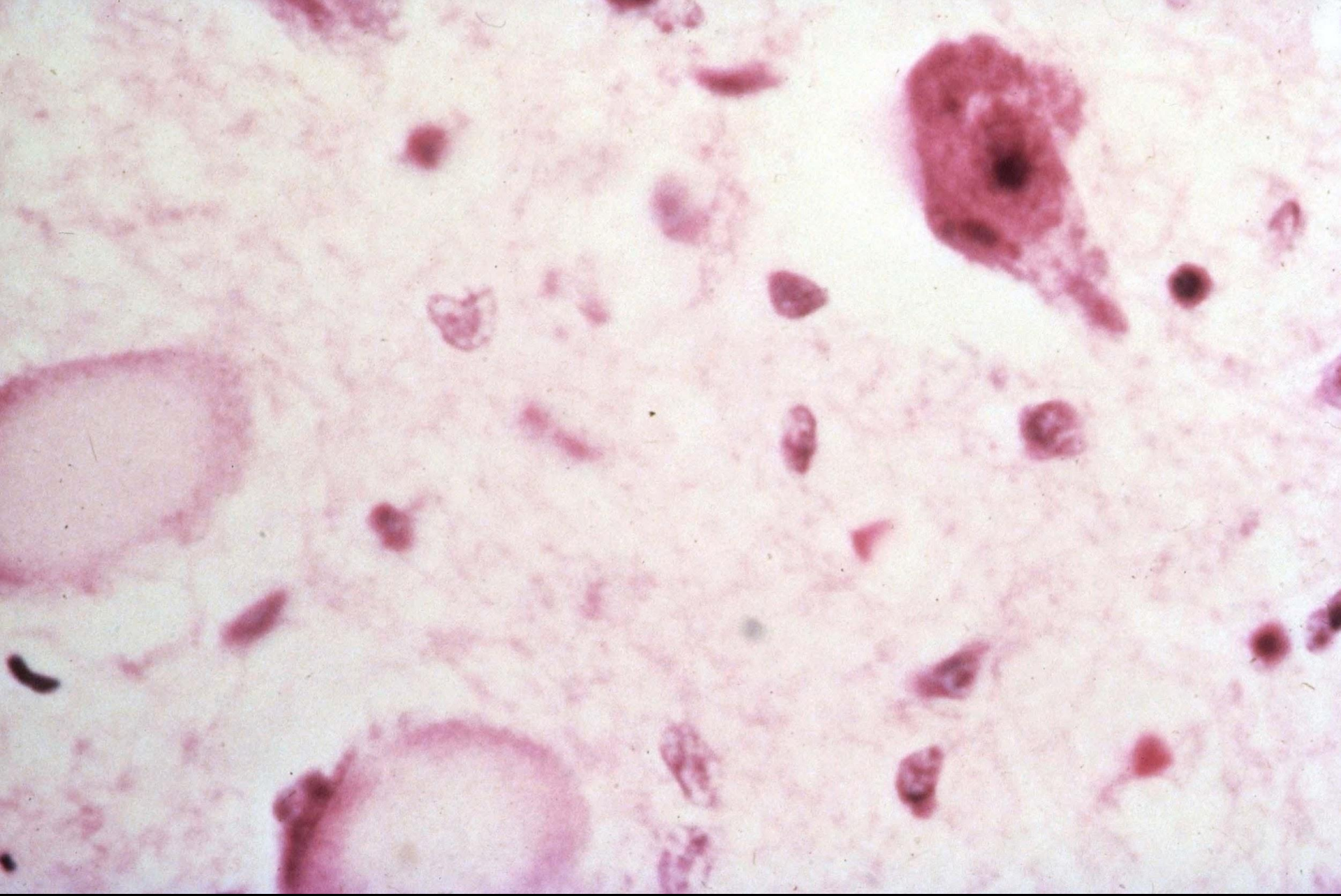
Motor Neuron Disease: PMA Type
(Neurogenic Fiber Group Atrophy)
(Skeletal Muscle Biopsy: Higher Magnification)

H & E



Normal Anterior Horn Cells
(Spinal Cord)

CV/LFB



Motor Neuron Disease: PMA Type
(Anterior Horn Cells showing Chromatolysis)

CV/LFB