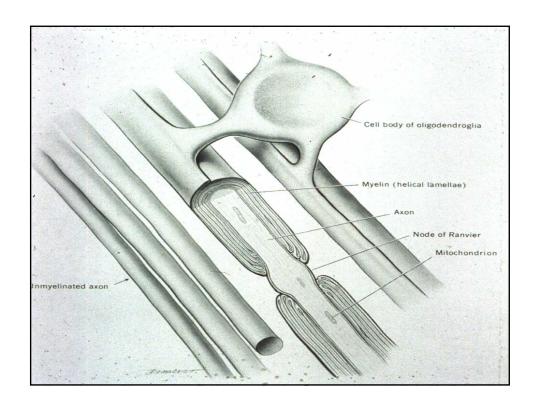
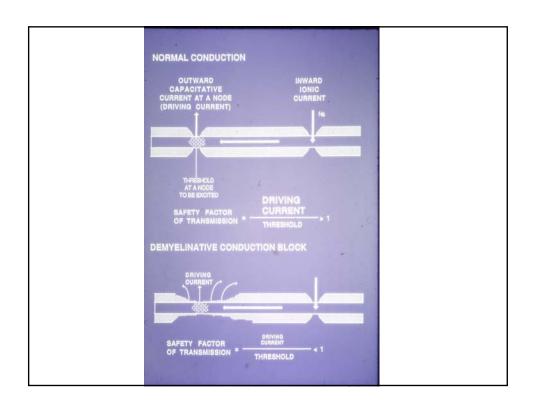
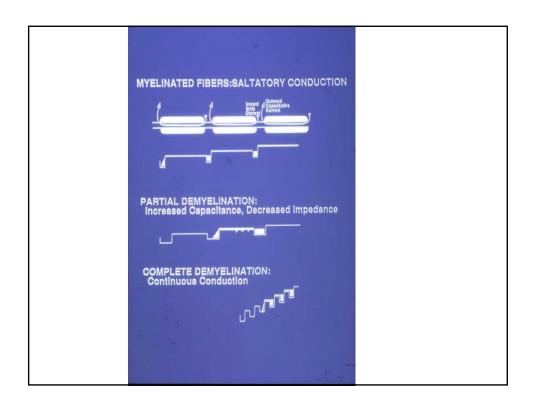


TABLE 1 SOME IONIC MECHANISMS IN IMPULSE CONDUCTION	
Depolarization	Opening of voltage-dependent Na + channels
Repolarization	Largely current leak
Refractory periods	Inactivation of Na <sup>+</sup> conductance
Supernormal period	Passive discharge of current stored in internodal mem- brane, limited in size by paranodal fast K + channels
Late subnormal period	Activation of nodal slow K + channels
Posttetanic subexcitability	
• Following short trains (H <sub>1</sub> )	Activation of nodal slow K + channels
• Following long trains (H <sub>2</sub> )	Activation of electrogenic Na <sup>+</sup> /K <sup>+</sup> pump



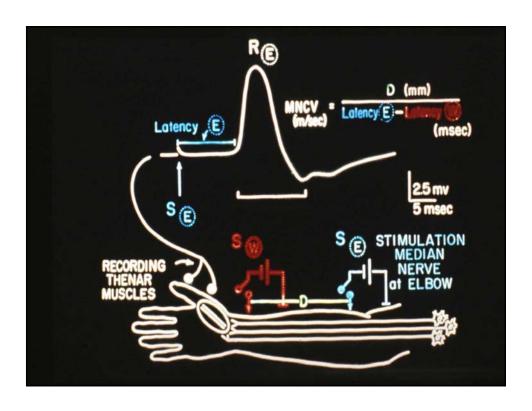


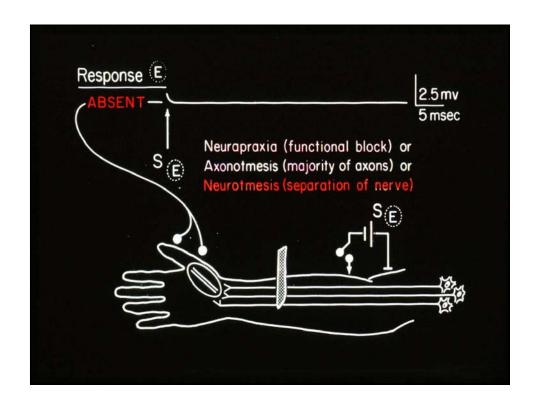


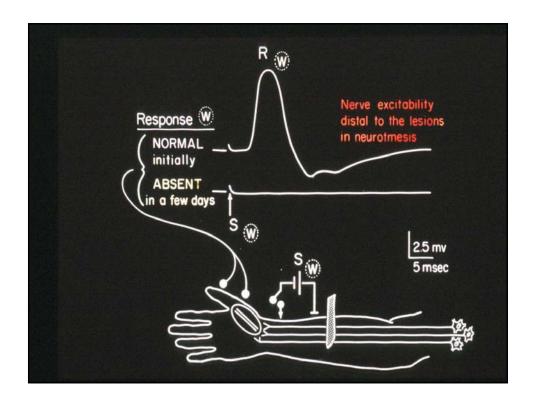


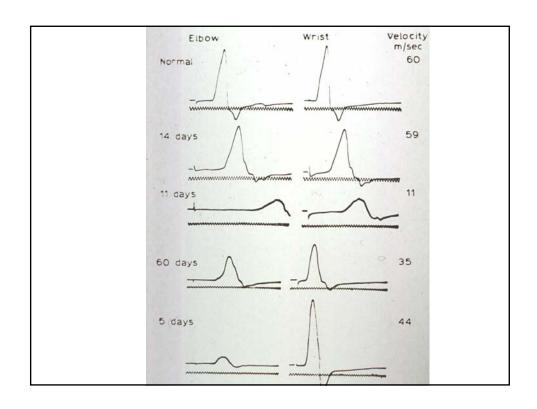
## PHYSIOLOGICAL CONSEQUENCES OF **DEMYELINATION**

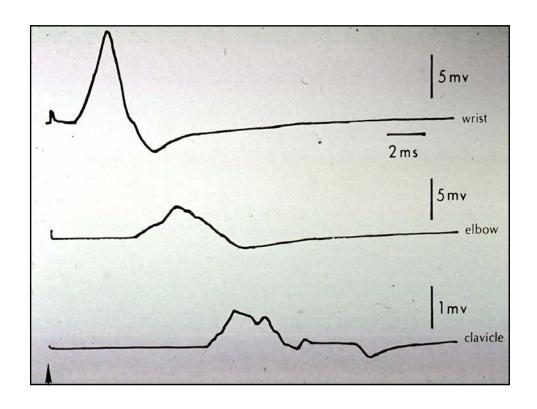
- 1. COMPLETE CONDUCTION BLOCK
- 2. SLOWED CONDUCTION
- 3. FAILURE TO TRANSMIT HIGH-FREQUENCY IMPULSES (RATE-DEPENDENT BLOCK)
  4. ECTOPIC IMPULSE GENERATION
- 5. EPHAPTIC TRANSMISSION

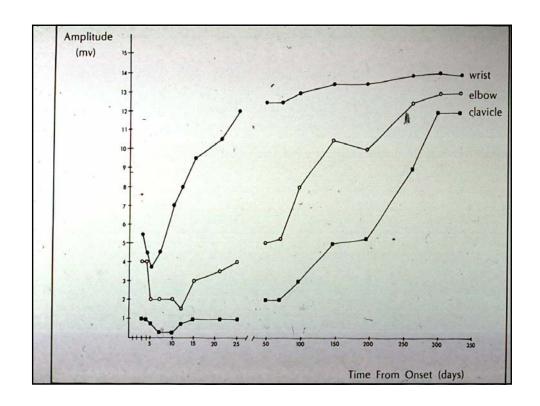












Case AW 39-year-old male, a businessman

C.C. Weakness in Hands and Legs

Weakness and Atrophy
in Lt Small Hand Muscles for 3 years
Rt Peroneal Muscles for 2 years
Lt Tibial Muscles for 1 year
Rt Small Hand Muscles for 6 months

Slowly Progressive Course and No Sensory Complaints

DTRs : Normal in Upper Extremities Hypoactive in Lower Extremities

Anti-GM1 Titer: X400

