***AMMAR YASEEN MANSOUR***

***The Pathophysiology of Bilateral-Response Spinal Hyperreflexia***

*"One sensory whisper becomes a bilateral motor shout."*

*[video](https://youtu.be/e2mXSrOPtXk)*[*To watch a brief video explaining the pathophysiology of the Bilateral-Response spinal hyperreflexia, click this link:*](https://youtu.be/e2mXSrOPtXk)

***Core Mechanism: Pathological Cross-Spinal Wiring***

***Trigger****: Functional absence of brain control post-UMN lesion →****Interneuron hyperactivity*** ***Response****:*

1. ***Revival of Dormant Pathways***
   * *Primitive bilateral circuits (abandoned in infancy) reactivated*
2. ***De Novo Commissural Bridging***
   * *Interneurons forge abnormal cross-connections between:*
     + *Ipsilateral sensory neurons (SN) ↔ Contralateral motor neurons (LMN)*
     + *Contralateral SN ↔ Ipsilateral LMN*
3. ***Circuit Fusion***
   * *Unilateral hyperreflex circuits merge into a****single pathological bilateral network***

*"Interneurons become anarchist diplomats—negotiating forbidden alliances across spinal borders."*

***Key Pathological Features***

| ***Normal Reflex*** | ***Bilateral Hyperreflexia*** |
| --- | --- |
| *Strictly unilateral response* | ***Obligatory bilateral motor output*** |
| *Stimulus-locked containment* | ***Cross-spinal signal spillover*** |
| *Cortical gating of overflow* | ***Unchecked interneuron-mediated crosstalk*** |

***Clinical Signature****:*

* *Unilateral stimulus (e.g., right patellar tap) → Bilateral knee extension*
* *Loss of lateralization in reflex tests*
* *"Mirror movements" in UMN lesions*

***Interneurons: The Architects of Chaos***

***Pathological Roles****:*

* + - ***Cross-Midline Signal Conduits:*** *Transmit sensory data to contralateral LMNs.*

*"A whisper in one limb becomes a shout in both."*

***Therapeutic Implications***

***Intervention Challenges****:*

1. ***Circuit Pervasiveness***
   * *Bilateral circuits resist focal treatments*
2. ***Neuroplasticity Paradox***
   * *Maladaptive wiring strengthens with time*

***Management Strategies****:*

| ***Approach*** | ***Mechanism*** |
| --- | --- |
| ***Intrathecal baclofen*** | *Suppresses interneuron glutamate release* |
| ***Dorsal root entry zone (DREZ) lesioning*** | *Disrupts sensory relay to interneurons* |
| ***Contralateral vibration therapy*** | *Preemptively desensitizes mirror circuits* |

***Conclusion: The Neurology of Spillover***

*This model frames bilateral hyperreflexia as: "A neural mutiny against laterality—where interneurons dismantle spinal cord apartheid, fusing reflex circuits into a single chaotic entity."*

*This explains three clinical truths:*

1. ***Why UMN lesions erase unilateralism***
   * *Lost cortical containment → Spinal signal flooding*
2. ***Why 'mirroring' predicts severity***
   * *Bilateral responses indicate extensive interneuron rewiring*
3. ***Why rehabilitation plateaus***
   * *Entrenched cross-circuitry resists retraining*

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*[video](https://youtu.be/e2mXSrOPtXk)* ***Pathophysiology of Bilateral-Response Spinal Hyperreflexia****For video explanation,*[*click here*](https://link/)

***Core Mechanism: Pathological Cross-Wiring***

*Trigger: Loss of UMN control → Spinal neural autonomy  
Response: Aberrant sensory-motor bridging across spinal segments:*

***Key Pathological Features***

| ***Normal Physiology*** | ***UMN Lesion Pathology*** |
| --- | --- |
| *Unilateral stimulus → Unilateral response* | *Unilateral stimulus → Bilateral motor output* |
| *Strict somatotopic containment* | *Cross-segmental/cross-lateral signal spillover* |
| *Cortical gating of neural overflow* | *Unchecked interneuronal crosstalk* |

***Clinical Hallmarks:***

* *Patellar tap (one knee) → Bilateral knee extension*
* *Plantar stimulation → Bilateral Babinski responses*
* *Loss of reflex lateralization*

***Role of Interneurons: The Chaos Architects***

1. *Cross-Midline Signal Bridges*
   * *Forge abnormal connections via:*
     + *Anterior white commissure*
     + *Long propriospinal tracts*
2. *Signal Amplifiers*
   * *Boost sensory gain 200-400% via glutamatergic hyperactivity*
3. *Synchronizers*
   * *Phase-lock LMN firing across hemispheres (→ mirror movements)*

***"One sensory whisper becomes a bilateral motor shout."***

***Why Recovery Fails***

1. *Self-Reinforcing Circuit*
   * *Reciprocal excitation: Contralateral LMN activation → Re-excites interneurons*
2. *Glial Scarring*
   * *Astrocytic barriers block cortical reintegration*
3. *Neuroplasticity Trap*
   * *Maladaptive synapses strengthen with time (the pathological circuit digs its own trenches)*

***Therapeutic Strategies***

| ***Goal*** | ***Approach*** | ***Limitations*** |
| --- | --- | --- |
| *Disrupt Cross-Talk* | *Intrathecal baclofen/GABA agonists* | *Systemic side effects* |
| *Desensitize Pathways* | *Contralateral vibration therapy* | *Temporary relief* |
| *Neural Resegmentation* | *Dorsal root entry zone (DREZ) lesioning* | *Irreversible damage* |

***Prognostic Insight:****Bilateral responses indicate advanced circuit entrenchment → Predicts poor rehabilitation outcomes.*

***Conclusion: The Neurology of Spilled Signals***

*This model reveals bilateral hyperreflexia as:*

*"A neural insurrection against somatotopy—where sensory impulses breach spinal cord borders, hijacking motor outputs on both sides."*

*This explains:*

1. *Why focal stimuli trigger global responses (lost spatial containment)*
2. *Why "mirroring" worsens over time (self-reinforcing circuit)*
3. *Why bilateral hyperreflexia = poor prognostic sign (irreversible maladaptive plasticity)*

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*In other contexts, you can also read the following articles:*

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| *[video](https://youtu.be/ClqHfY65WQI)* | [*The Spinal Reflex, New Hypothesis*](https://drive.google.com/file/d/1Nh0yxWLf3gPOlSKdftIZykUjb3xpsPBe/view?usp=sharing) *of Physiology* |
| *[video](https://youtu.be/qlgZUbWVXzs)* | [*The Hyperreflexia, Innovated Pathophysiology*](https://drive.google.com/file/d/14TlTu_9KrF0DGbEDE_VgCpYdSAzBMVU7/view?usp=sharing) |
| *[video](https://youtu.be/kwwsHHKh0AQ)* | [*The Spinal Shock*](https://drive.google.com/file/d/1qQ6Ch-mVj1boww9SAhkPVTwFhX2kVoXR/view?usp=drive_link) |
| *[video](https://youtu.be/rBk0X29hs6w)* | [*The Spinal Injury, the Pathophysiology of the Spinal Shock, the Pathophysiology of the Hyperreflexia*](https://drive.google.com/open?id=1qQ6Ch-mVj1boww9SAhkPVTwFhX2kVoXR) |
| *[video](https://youtu.be/rBk0X29hs6w)* | [*Upper Motor Neuron Lesions, the Pathophysiology of the Symptomatology*](https://drive.google.com/file/d/1kwE-QYZWVzHsadu0wFL4Ckl5o2hGaxMe/view?usp=sharing) |
| *[video](https://youtu.be/G6my9xo1iM8)* | [*The Hyperreflexia (1), the Pathophysiology of Hyperactivity*](https://drive.google.com/file/d/1vZcRPdwBC4iqv8jwi3YewvOv9yKfegt4/view?usp=drive_link) |
| *[video](https://youtu.be/q1mMORyoNLY)* | [*The Hyperreflexia (2), the Pathophysiology of Bilateral Responses*](https://drive.google.com/file/d/1Gd85ZcKFIMG_0H6QeE7mez4-XvP1o2OV/view?usp=sharing) |
| *[video](https://youtu.be/5iViwU_y3-M)* | [*The Hyperreflexia (3), the Pathophysiology of Extended Hyperreflex*](https://drive.google.com/file/d/18soM_THFCzezkfBfBEG9UdoO0qWHLGlz/view?usp=sharing) |
| *[video](https://youtu.be/PteMImPyZ0A)* | [*The Hyperreflexia (4), the Pathophysiology of Multi-Response Hyperreflex*](https://drive.google.com/file/d/1xRj0t5guxfzMsl3b0aeg6SHdWCwlQIEw/view?usp=sharing) |
| *[video](https://youtu.be/crbdk1RTU64)* | [*The Clonus, 1st Hypothesis of Pathophysiology*](https://drive.google.com/file/d/1WoXzIR5GdtpjYZ-4UjfFt62Kat6rn8K8/view?usp=sharing) |
| *[video](https://youtu.be/DKdPe-RJsn4)* | [*The Clonus, 2nd Hypothesis of Pathophysiology*](https://drive.google.com/file/d/1YOWvqNtk818HbIQVaevYI-dwIk4Bonsj/view?usp=sharing) |
| *[video](https://youtu.be/1nP8K8aW3uE)* | [*The Clonus, Two Hypotheses of Pathophysiology*](https://drive.google.com/file/d/1YOWvqNtk818HbIQVaevYI-dwIk4Bonsj/view?usp=sharing) |
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| *[video](https://youtu.be/jqfp4e2t9jU)* | [*The Nerve Transmission through Neural Fiber, Personal View vs. International View*](https://drive.google.com/open?id=1HYCsolqvWnlD9dbmqKzKc1wSo6CnFxwn) |
| *[video](https://youtu.be/6ChlKWK4OLs)* | [*The Nerve Transmission through Neural Fiber (1), The Action Pressure Waves*](https://drive.google.com/open?id=1OPh2-qAwl2LqWLxdKY_WhJdFAKmCbbcC) |
| *[video](https://youtu.be/_ayskJT4v5c)* | [*The Nerve Transmission through Neural Fiber (2), The Action Potentials*](https://drive.google.com/open?id=1T3EBNAcw_a5S4AoTJRdbOUpY0tVCtU4Y) |
| *[video](https://youtu.be/55zCk35swKs)* | [*The Nerve Transmission through Neural Fiber (3), The Action Electrical Currents*](https://drive.google.com/open?id=1w62cTew8Rdr0nQnaBUvVQmhc2vNI7iTj) |
| *[video](https://youtu.be/5A-S1GgHqjk)* | [*The Function of Standard Action Potentials & Currents*](https://youtu.be/5A-S1GgHqjk) |
| *[video](https://youtu.be/GkSeiaw2vMk)* | [*The Three Phases of Nerve transmission*](https://drive.google.com/open?id=1qSxDdr6CutOhf-Jshr4khVVzjYiNX0vi) |
|  |  |
| *[video](https://youtu.be/OJ7B5uYBjJU)* | *[Neural Conduction in the Synapse (Innovated)](https://drive.google.com/file/d/1zsVbsJKN-JefkMdGBJcRKbBzjX4ly24S/view?usp=share_link)* |
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| *[video](https://youtu.be/BLTTas1CF8c)* | [*Nodes of Ranvier, the Equalizers*](https://drive.google.com/open?id=1e0zPzYHnHfzR6pswcgyr5jF8rUi_yo77) |
| *[video](https://youtu.be/_uIAVuMdTvw)* | [*Nodes of Ranvier, the Functions*](https://drive.google.com/open?id=15E7qLoDIl4glTeAKBs15tvn-5Q99p1nF) |
| *[video](https://youtu.be/Aad-ynawPrs)* | [*Nodes of Ranvier, First Function*](https://youtu.be/hZ_bzG8kiFE) |
| *[video](https://youtu.be/zGRVmB0zta0)* | [*Nodes of Ranvier, Second Function*](https://youtu.be/OqH6r2qhmxY) |
| *[video](https://youtu.be/uP4QKEZsanA)* | [*Nodes of Ranvier, Third Function*](https://youtu.be/IFSf8eo8V9Y) |
| *[video](https://youtu.be/WtCIWXXP8wU)* | [*Node of Ranvier, The Anatomy*](https://youtu.be/WtCIWXXP8wU) |
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| *[video](https://youtu.be/sEuDDBoeCIA)* | [*The Wallerian Degeneration*](https://drive.google.com/open?id=1Al56zec4gm7qWRkIN1EWuXnDu6Fa-Puz) |
| *[video](https://youtu.be/CGyaV6w5594)* | [*The Neural Regeneration*](https://drive.google.com/open?id=18k3PJaNlLYsL_B6K6Mvb1Fg5gYHJJuSN) |
| *[video](https://youtu.be/1CkexgXUv2A)* | [*The Wallerian Degeneration Attacks Motor Axons, While Avoids Sensory Axons*](https://drive.google.com/open?id=16UIXUrcsMn2_pHNeDbAlIkqjwK6vVA8R) |
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| *[video](https://youtu.be/VRTXlfXutUs)* | [*The Sensory Receptors*](https://drive.google.com/open?id=1kii7l4bCrQ-Zey4sCO51mqZ5DSXUNO2H) |
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| *[video](https://youtu.be/zDgKMpNvQHI)* | [*Nerve Conduction Study, Wrong Hypothesis is the Origin of the Misinterpretation (Innovated)*](https://drive.google.com/open?id=1tEuDZryjUH1aBm9D0F9eQ9ME9KkfcpJL) |
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| *[video](https://youtu.be/ERg0rdaDsZ4)* | [*Piriformis Muscle Injection\_ Personal Approach*](https://drive.google.com/file/d/1d0p-Zx0KOSG3LO29xmdH4R-vMKBgULIf/view?usp=sharing) |
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| *[video](https://youtu.be/K_4NgfxD18g)* | [*The Philosophy of Pain, Pain Comes First! (Innovated)*](https://drive.google.com/open?id=1HHkOUQnYOy2yrnl6h68dLt0fL0V6toDO) |
| *[video](https://youtu.be/LWLXuXbs4yI)* | [*The Philosophy of the Form (Innovated)*](https://drive.google.com/open?id=1qFVpN21binPozXFCcuGrf-io0nDLlBi3) |
| *[video](https://youtu.be/sYFlZ-2EM20)* | [*Pronator Teres Syndrome, Struthers-Like Ligament (Innovated)*](https://drive.google.com/open?id=103EXeNX0ekUNDZjyLyU1pJLaz_sSyAia) |
| *[video](https://youtu.be/wofEWjGJFS0)* | [*Ulnar Nerve, Congenital Bilateral Dislocation*](https://drive.google.com/file/d/1V2mKzzV_RjoCYoJ0LRBelClJmiRv-ZnX/view?usp=sharing) |
| *[video](https://youtu.be/9u9yDd8NIoE)* | [*Posterior Interosseous Nerve Syndrome*](https://drive.google.com/open?id=1JsmICiXRYKNbYg3CiW9YlZm4pRBJ5SOB) |
| *[video](https://youtu.be/yLyRSiN2EEo)* | [*The Multiple Sclerosis: The Causative Relationship Between The Galvanic Current & Multiple Sclerosis?*](https://drive.google.com/file/d/1M0GTyJSsuc9ZWo8FnHPensmcptwHr0mR/view?usp=sharing) |
| *[video](https://youtu.be/6XkNgguYEz4)* | [*Cauda Equina Injury, New Surgical Approach*](https://drive.google.com/file/d/1Pux0iKaOxZxkVPYAZzJmVfWeu2Oz-mVC/view?usp=sharing) |
| *[video](https://youtu.be/ZlNvPM0fh8A)* | [*Carpal Tunnel Syndrome Complicated by Complete Rupture of Median Nerve*](https://drive.google.com/file/d/1sHhWsaH47QJ5PzCDWlFd2KqiExBcONyl/view?usp=sharing) |
| *[video](https://youtu.be/rJoXOrr_IIE)* | [*Biceps Femoris' Long Head Syndrome (BFLHS)*](https://drive.google.com/file/d/14y1g0Y9ThOqYRwJOsh1e5FIuxUurYDgJ/view?usp=sharing) |
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| *[video](https://youtu.be/2twXxX6T9zY)* | [*Barr Body, The Whole Story (Innovated)*](https://drive.google.com/open?id=1MsjgYESiWd3slc7i9s9mSiwOAnWFfrys) |
| *[video](https://youtu.be/VsmAEwMexmE)* | [*Adam's Rib and Adam's Apple, Two Faces of one Sin*](https://drive.google.com/open?id=1SEtq6SqQxNHHOn0q4TqrS2mhVumXNQv5) |
| *[video](https://youtu.be/jjl8SMMkLeA)* | [*Adam's Rib, could be the Original Sin?*](https://drive.google.com/open?id=10CEzaQ2cbFr6CQI-d8VTur7Ekq2VnyF0) |
| *[video](https://youtu.be/Ofn55E_fYJI)* | [*Barr Body, the Second Look*](https://drive.google.com/file/d/1-aKUsKo4-IIkdd9BsKK70iYutlycSwl6/view?usp=sharing) |
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| *[video](https://www.youtube.com/watch?v=kj9OggVj50E)* | [*Who Decides the Sex of Coming Baby?*](https://drive.google.com/file/d/1fxYwPRwuwGr5sv183v1m7LEwx24jpjf0/view?usp=sharing) |
| *[video](https://youtu.be/byGU-uDGAzM)* | [*Boy or Girl, Mother Decides!*](https://drive.google.com/open?id=1Mq5x5lqJ1givipdwAjcFyHAkEqdiJIdH) |
| *[video](https://youtu.be/L0Odkd-9ZHY)* | [*Oocytogenesis*](https://drive.google.com/file/d/1UR57GGSvkorIaZCrBbjwWT2FCngu4x21/view?usp=sharing) |
| *[video](https://youtu.be/AA252qjldLk)* | [*Spermatogenesis*](https://drive.google.com/file/d/1dFhcEwK7X9_80oogfleEqy34PmuYHTb6/view?usp=sharing) |
| *[video](https://youtu.be/kQQxHeSzUn4)* | [*This Woman Can Only Give Birth to Female Children*](https://drive.google.com/file/d/1RLsOrpSIqwaR8FpwVi4fg5ep1G5JqIg_/view?usp=sharing) |
| *[video](https://youtu.be/PYJtcfPs8mI)* | [*This Woman Can Only Give Birth to Male Children*](https://drive.google.com/file/d/1AuNzWbVMNIb48U34jkaDUveEqXXiPZGp/view?usp=sharing) |
| *[video](https://youtu.be/__xbNXe8qNU)* | [*This Woman Can Give Birth to Female Children More Than to Male Children*](https://drive.google.com/file/d/1vTtka8UuJNytX_ENOuMNnf3Tdjlh62pu/view?usp=sharing) |
| *[video](https://youtu.be/M5bRtMwcj94)* | [*This Woman Can Give Birth to Male Children More Than to Female Children*](https://drive.google.com/file/d/1D91xR5HCmVGdOSTBEiWOV6nz2gvxxrpS/view?usp=sharing) |
| *[video](https://youtu.be/BXtbeYa6Nek)* | [*This Woman Can Equally Give Birth to Male Children & to Female Children*](https://drive.google.com/file/d/1EkNaarumQgOwxLQicLFd8Ab4nGWWzej9/view?usp=sharing) |
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| *[video](https://youtu.be/zmAQkMtKkME)* | [*Eve Saved Human Identity; Adam Ensured Human Adaptation*](https://drive.google.com/file/d/1UDzf2KjgQgOFEfJG9eKlIdrrpgafkNls/view?usp=sharing) |
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| *[video](https://youtu.be/H6GaaNu7U3s)* | [*Coronavirus (Covid-19): After Humiliation, Is Targeting Our Genes*](https://drive.google.com/file/d/1qlQnlS-PBrSVan0HWubuMQzwnFwFP9UY/view?usp=sharing) |
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| *[video](https://youtu.be/QiL2et83B6Q)* | [*Mitosis in Animal Cell*](https://drive.google.com/file/d/1pekYoORykP7Bbl6o-VMAI8pJPcj1JVYh/view?usp=sharing) |
| *[video](https://youtu.be/PHOY1qlw0AM)* | [*Meiosis*](https://drive.google.com/file/d/1-a1NFgX0ndKYY6GRrEBJSmCpEBiOXnzx/view?usp=sharing) |
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| *[video](https://youtu.be/8OIvbXZ0xM4)* | [*Universe Creation, Hypothesis of Continuous Cosmic Nebula*](https://drive.google.com/file/d/1Hs27xIEXwX7Yb9a5XvoiM_Qk5o3ufmUg/view?usp=sharing) |
| *[video](https://youtu.be/UPyZWXSon3Y)* | [*Circulating Sweepers*](https://drive.google.com/file/d/1FIZvJF67F5te_ye8V1mZDx_aVtF2k8tc/view?usp=sharing) |
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| *[video](https://youtu.be/wB1F9p8PICE)* | [*Pneumatic Petrous, Bilateral Temporal Hyperpneumatization*](https://drive.google.com/file/d/1lbewP5eC703bxcRw0VZV2W1x4OY9oStV/view?usp=sharing) |
| *[video](https://youtu.be/Z2D0HCZgDqY)* | [*Congenital Bilateral Thenar Hypoplasia*](https://drive.google.com/file/d/1UVKs2UyHbSpiwbEqWugkA881FUIot06M/view?usp=sharing) |
| *[video](https://youtu.be/pftu_ZNUy9w)* | [*Ulnar Dimelia, Mirror hand Deformity*](https://drive.google.com/file/d/15EJ_xT13PAwDhw3GEypnt0gqBzvzvVug/view?usp=sharing) |
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| *[video](https://youtu.be/72J4c7Gof-g)* | [*Surgical Restoration of a Smile by Grafting a Segment of the Gracilis Muscle to the Face*](https://drive.google.com/file/d/14AZMJJjeaVTdPn3wxPn7e2XqlRGdOPzq/view?usp=drive_link) |
| *[video](https://youtu.be/Dn4vEpJYaSg)* | [*Mandible Reconstruction Using Free Fibula Flap*](https://drive.google.com/file/d/1Nv2YLBSc5TC7VFXBUVp9KAga4eUQmqfg/view?usp=sharing) |
| *[video](https://youtu.be/wLhKIBIb3gA)* | [*Presacral Schwannoma*](https://drive.google.com/file/d/1EzZ10x4KR3ep0Xp4Ldq1f2u9u8SECNP9/view?usp=sharing) |
| *[video](https://youtu.be/-q9DZFaKwF8)* | *[Liver Hemangioma: Urgent Surgery of Giant Liver Hemangioma](https://drive.google.com/file/d/1ui0t-Ao-st4GeijhyaXc1Hjbj9uYaaKy/view?usp=sharing)*  *[Due to Intra-Tumor Bleeding](https://drive.google.com/file/d/1ui0t-Ao-st4GeijhyaXc1Hjbj9uYaaKy/view?usp=sharing)* |
| *[video](https://youtu.be/MQShaLlN-Y0)* | [*Free Para Scapular Flap (FPSF) for Skin Reconstruction*](https://drive.google.com/file/d/1Z1hkl2E6N95ld1tXIYaTfvL6lw4mqQ1P/view?usp=sharing) |
| *[video](https://youtu.be/4dC-2vNDGpI)* | [*Claw Hand Deformity (Brand Operation*](https://youtu.be/4dC-2vNDGpI)*)* |
| *[video](https://youtu.be/fDjXCSHGuvA)* | [*Algodystrophy Syndrome Complicated by Constricting Ring at the Proximal Border of the Edema*](https://drive.google.com/file/d/1D-h2Ck-VdsJyA5dukbliwXwOh_-t2HUz/view?usp=sharing) |
| *[video](https://youtu.be/OKv1iogYIMA)* | [*Non- Traumatic Non- Embolic Acute Thrombosis of Radial Artery (Buerger’s Disease)*](https://drive.google.com/file/d/1ZaKpD0XVdQxY6FR44PyBeFfv_RKzXj_x/view?usp=sharing) |
| *[video](https://youtu.be/2hJw4jKCyfg)* | [*Isolated Axillary Tuberculosis Lymphadenitis*](https://drive.google.com/file/d/1aC9W8XO6UNHljyS3iAwlP2fiuH85D3Lr/view?usp=sharing) |
| *[video](https://youtu.be/rKabisSM5MQ)* | [*The Iliopsoas Tendonitis... The Snapping Hip*](https://drive.google.com/file/d/1NUslspZfeaO5W4Hu2bJPNjq7syQlgQ2t/view?usp=drive_link) |
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| *[video](https://drive.google.com/file/d/1m_O7jCbrw-oT98vb4y2hs_ztznRC5pat/view?usp=sharing)* | [*The Lone Wolf*](https://drive.google.com/file/d/1B0osXS1SW7h-xfWwCN8DN2Nk4QF4eqB5/view?usp=drive_link) |
| *[video](https://drive.google.com/file/d/1fpXPiIpTxRl3IT_dMeLzFj1ZXd4Bo6p1/view?usp=sharing)* | [*The Delirium of Night and Day*](https://drive.google.com/file/d/1pKdYMAPUPrdtWBXrRXYZYlGIPg3G9Xhb/view?usp=drive_link) |
| *[video](https://drive.google.com/file/d/1dOsuna7dES5isqemZgkfpJH_HIyLsiAs/view?usp=sharing)* | [*The Delirium of the Economy*](https://drive.google.com/file/d/1OtDMBt439gOf12SFE73W0Re09ldEuU9U/view?usp=drive_link) |
| *[video](https://drive.google.com/file/d/1yo1yDuNxdD7i_Edi9CnaCUjmp0_A85fM/view?usp=drive_link)* | [*Ovaries in a Secure Corner… Testicles in a Humble Sac: An Inquiry into the Function of Form*](https://drive.google.com/file/d/1DeALuwHlQ_kThaVk--W_P04b9MksjiWD/view?usp=drive_link) |
| *[video](https://drive.google.com/file/d/17HUzsFJW5-QTSNdM-KrrMb3VDi9erYyp/view?usp=sharing)* | [*Eve Preserves Humanity’s Blueprint; Adam Drives Its Evolution*](https://drive.google.com/file/d/19kB5tQ9UIeaen29iyOZwZlgqG0r3IynI/view?usp=drive_link) |

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