腦性痲痺
出生前後因為腦部缺氧所造成
Infantile Autism

Boy sits apart, detached, demonstrates ritualistic behavior by spinning wheels of upside-down truck while other children play

Sections of hippocampus showing impaired development in autistic brain compared with normal (control) brain.

Smaller, denser neurons in autistic hippocampus.

Cerebellar cortical and nuclear atrophy in autistic brain. Arrows indicate areas of sections B and C.
Migraine

Aura

Visual disturbances, most common element of migraine aura: blurred cloudy vision, scotomas, scintillating zigzag lines (fortification spectrum), flashes of light, etc.

Some other manifestations of aura, which may occur individually or in combination

Transient aphasia
Vertigo

Photophobia

Thick speech

Pallor

Chills

Tremor

Unilateral numbness or weakness

Attack

Severe, throbbing headache; unilateral at first but may spread to opposite side

"Sonophobia"

Photophobia

Local erythema may be present

Speaks in low voice to avoid aggravating pain

Pallor, perspiration

Vomiting may occur
癲癇

全盤性發作
大發作
小發作

部份發作
簡單部份發作
複雜部份發作

A. Tonic phase
Epileptic cry
Cyanosis
Generalized stiffening of body and limbs, back arched (opisthotonus)

B. Clonic phase
Salivary frothing
Eyes blinking
Cyanosis
Incontinence
Clonic jerks of limbs, body and head

C. Postictal stupor
Unresponsive
Salivary drooling
Limbs and body limp

EEG: tonic phase
EEG: clonic phase
EEG: postictal
Left lateral view showing left frontal depressed fracture

Left lateral view showing occipital depressed fracture

Compound depressed fracture. Hair impacted into wound.

Elliptical incision with extensions to remove devitalized skin and perioranium.

Burr hole placed at margin of fracture to facilitate elevation of depressed bone fragments. Bone edges, dura and brain then debrided.

Watertight dural closure. Optionally, bone fragments may be cleaned and wired in place. Skin is closed in one layer.
Cervical Spine Injury: Compression

Mechanism: Vertical blow on head as in diving or surfing accident, being thrown from car, or football injury

Burst fracture with characteristic vertical fracture through vertebral body

X-ray film showing fracture of C5

More severe trauma explodes vertebral body. Posteriorly displaced bone fragments frequently produce spinal cord injury

X-ray film showing fracture of C6
Neurofibromatosis (von Recklinghausen’s Disease)

One of von Recklinghausen’s original patients, who had extensive subcutaneous nodules but no neurologic symptoms. Fortunately, such widespread skin involvement is uncommon.

Girl with typical café au lait spots but only a few skin nodules. Relatively mild neurofibromatous scoliosis is present.

X-ray film showing severe scoliosis, with typical sharp angulation unresponsive to corrective measures, often seen in neurofibromatosis.

Young woman with bilateral facial palsy (note drooping of cheeks) due to compression of both facial (VII) nerves by acoustic neuromas, which also caused hearing loss. Proptosis resulted from bilateral optic (II) nerve tumors. Subcutaneous nodules developed on her forehead, and masses in her neck compressed the trachea. Disease was fatal in this patient.
Alzheimer's Disease: Clinical Manifestations, Progressive Phases

Memory loss
"Where is my checkbook?"

Spatial disorientation
"Could you direct me to my office? I have the address written down here somewhere, but I can’t seem to find it"

Circumlocution
Asks husband, "John dear, please call that woman who fixes my hair"

More advanced phase
Sluggishly dressed, slow, apathetic, confused, disoriented, stooped posture

Terminal phase
Bedridden, stiff, unresponsive, nearly mute, incontinent
巴金森氏症

Parkinsonism: Successive Clinical Stages

Stage 1: unilateral involvement, blank face; affected arm in semiflexed position with ataxia; patient leans to unaffected side.

Stage 2: unilateral involvement with early postural changes; slow, shuffling gait with decreased excursion of legs.

Stage 3: pronounced gait disturbances and moderate generalized disability; postural instability with tendency to fall.

Stage 4: significant disability; limited ambulation with assistance.

Stage 5: complete invalidism; patient confined to bed or chair; cannot stand or walk even with assistance.
小兒痲痺症

病毒所傳染

Relative distribution of neuronal lesions in spinal and bulbar poliomyelitis

Paralytic residua of spinal poliomyelitis

Scoliosis

Multiple crippling deformities: contractures, atrophy, severe scoliosis and equinovarus

Genu recurvatum, atrophy of limb
破傷風

Tetanus

Organisms enter through large, small, or even unrecognized wound. Deep, infected punctures are most susceptible, since organisms thrive best anaerobically.

Clostridium tetani: gram-positive, spore-bearing rods

Toxin produced locally passes via bloodstream or along nerves to central nervous system.

Spasm of jaw, facial and neck muscles (trismus [lockjaw], risus sardonicus) and dysphagia are often early symptoms after variable incubation period.

Motor neurons of spinal cord (anterior horn) and of brainstem become hyperactive because toxin specifically attacks inhibitory (Renshaw) cells.

Complete tonic spasm in advanced disease. Patient rigid in moderate opisthotonus, with arms extended, abdomen boardlike. Respiratory arrest may occur.
### Clinical Features of Herniated Lumbar Nucleus Pulposus

<table>
<thead>
<tr>
<th>Level of Herniation</th>
<th>Pain</th>
<th>Numbness</th>
<th>Weakness</th>
<th>Atrophy</th>
<th>Reflexes</th>
</tr>
</thead>
<tbody>
<tr>
<td>L4-5 disc; 5th lumbar nerve root</td>
<td>Over sacroiliac joint, hip, lateral thigh and leg</td>
<td>Lateral leg, first 3 toes</td>
<td>Dorsiflexion of great toe and foot; difficulty walking on heels; foot drop may occur</td>
<td>Minor</td>
<td>Changes uncommon in knee and ankle jerks, but internal hamstring reflex diminished or absent</td>
</tr>
<tr>
<td>L5-S1 disc; 1st sacral nerve root</td>
<td>Over sacroiliac joint, hip, posterolateral thigh and leg to heel</td>
<td>Back of calf, lateral heel, foot and toe</td>
<td>Plantar flexion of foot and great toe may be affected; difficulty walking on toes</td>
<td>Gastrocnemius and soleus</td>
<td>Ankle jerk diminished or absent</td>
</tr>
</tbody>
</table>

Surgical exposure of lower lumbar disc herniation.