Dementia

Psychology 311
Abnormal Psychology

Listen to the audio lecture while viewing these slides

Overview

- Is a gradual loss of intellectual abilities
- Interferes with social or occupational functioning
- Usually has gradual onset

Psyc 311 – Abnormal Psychology

Senile Dementia

- Usually occurs in individuals 65 or older
- Get progressive atrophy of brain tissue
- Get abnormal brain waves
- Primarily distinguished by memory and cognitive impairment
- Effects more females than males 2:1
- 56% of all people 65 or older living in institutions are diagnosed with dementia

Includes

- Memory loss
- Loss of Self Control
- Confusion
- Problems with personal hygiene
- Language problems
- Motor problems
- Personality Changes
- Lives in the past
  - Anterograde or Retrograde Amnesia

Symptoms

- Get worse later in the day
  - Due to fatigue,
  - Decrease in NT with use
  - Other reasons
- Confabulation
  - Is a key symptom
  - Occurs when you loose part of your memory
    - Fill in the gaps
  - Often is inaccurate but usually is very detailed

Other Symptoms

- Paranoid Thinking
- Agitation
- Depressive symptoms
  - Irritability
  - Restlessness
  - Others
Alzheimer's Disease
- Identified by Alois Alzheimer in 1907
- Most common form of Senile Dementia
  - More than ½ the cases
- Brain tissue deteriorates
  - Death – 10-12 years
- Statistics vary
  - 23,000 die each year
  - 100,000 die each year
- Places huge demands on health care resources
  - 60% of all nursing home patients

Biology
- May have a genetic component but evidence is mixed
  - Chromosome 21
- Not sure if Alzheimer’s Disease is the cause of neural degeneration or the result of neural degeneration.
- Biochemically
  - Patients have less Ach in the brain
- No known brain trigger
- Can use brain scans to confirm diagnosis by ruling out other causes
- Confirmation is only at autopsy
  - Neurofibrular tangles
  - Senile Plaques

Issues
- Caregivers most common complaints about Alzheimer’s Patients
  - Depression
  - Hostility, belligerence, aggression to staff
  - Confused about people, places, time
  - Wandering off, restless
  - Anxiety, suspicious
- Most caregivers experience extreme stress
  - Have a general lack of control over what happens next

Treatment
- No real treatment
- Give Ach inhibitors
  - Increases Ach at synapse sites
  - Have been trying at earlier ages when initial symptoms begin
  - Appears to delay onset

Pick's Disease
- Much less common than Alzheimer’s
- Develops between 60-70 years old
- Symptoms are similar to Alzheimer's
  - Can only tell at autopsy
    - Has specific types of brain atrophy
- May have a genetic factor
- Effects more males than females
Psyc 311 – Abnormal Psychology

Huntington’s Disease

- Is a rare hereditary disorder
- Is transmitted by a single gene
  - Chromosome 4
- Get progressive degeneration
- Onset begins about age 30-50
  - New children by the person passes on the gene
- Screening is available

Symptoms

- Four types
  - Dementia
  - Irritability
  - Apathy
  - Depression
- Get involuntary spasmodic jerking
- Twisting movements
- Facial grimacing

Other symptoms

- Memory lessens
- Intelligence decreases before the appearance of movement disorders
- Paranoia
- Depression

Psyc 311 – Abnormal Psychology

Parkinson’s Disease

- Progression begins about age 50
- Is a progressive disease

Symptoms

- Tremor at rest
- Progresses to rigidity
- Get a loss of vocal power
- Have social withdrawal
- Emotionally are overcontrolled
- Intellectual ability decreases

Causes and Treatment

- Reduction of Dopamine in Basal Ganglia structure
- Treatment
  - Drugs
    - L-dopa
    - Is a precursor to dopamine
    - Crosses the blood brain barrier and is converted to dopamine.

Psyc 311 – Abnormal Psychology

Other Disorders
### Traumatic Brain Injury

- Can occur from
  - Accidents/Injuries
  - Cerebral Vascular Accidents / Strokes

### Broken Down into Groups

- **Concussions**
  - Are temporary
  - Causes temporary changes in mental states
  - Do not cause permanent structural damage

- **Contusions**
  - Are diffuse
  - Give fine structural damage
  - Get rupturing of tiny vessels

- **Lacerations**
  - Are major tears or ruptures of brain tissue
  - Cause major damage very rapidly
  - May be fatal

### Symptoms

- Headaches
- Vision problems
  - Can be rapid or gradual onset
  - Unequal pupils
- Paralysis or numbing on one or both sides of the body
- May have bleeding or fluid from ears, nose, or skull

### Treatment

- **Prevention**
  - Use helmets where head injuries may occur
  - Reduce hypertension, weight
  - Use of drugs later in life
    - ASA
  - Don’t wait if symptoms develop
    - Immediate treatment is a MUST

### Treatment Options

- **Drugs**
  - Clotting or thinning
  - Neurosurgery
  - Releasing of brain pressure caused by blood

- **Key**
  - Prevention

### General Paresis

- Caused by untreated infections
- Example
  - Syphilis
    - If treated in early stages, no problems
    - If untreated, brain deteriorates
      - Paralysis
      - Psychosis
      - Ultimately death
Korsakoff’s Syndrome

- Results from vitamin B and nutritional deficiency
- Usually seen in chronic alcoholics
- Is a irreversible disorder
- Get recent and past memory loss
- Get perceptual deficits
- Longer the vitamin deficiency, the less response to vitamin therapy

Treatment

- Start on B vitamins ASAP
- May use injection to get started
- Oral administration may not have an effect due to problems with absorption in the intestines.
- Try to reduce or eliminate alcohol consumption

Epilepsy

- Is not a disease
- Is a symptom of recurrent changes in state of consciousness
- Electrical state in the brain changes
  - Causes an electrical storm in the brain
  - Result – seizure
  - Several types of seizures

Grand mal (Great Illness)

- Lasts 2-5 minutes
- Usually proceeded with an Aura
  - Smell, Taste, Flash of light
  - Often begins with a cry
- Get a loss of consciousness
- Extreme muscle spasms, fall to floor
- Get contraction and relaxation of muscles
  - May experience head injuries
  - May bite mouth or tongue

Petit Mal

- Is more common in children
- Do not have convulsions
- May or may not have a loss of consciousness
- Person experiences blank stare
  - May last up to 1 minute
  - May occur many times a day

Incidence

- Highest in early years of life
- Remains steady through middle age
- Peaks in elderly
**Psyc 311 – Abnormal Psychology**

**Treatment**

- Antiepileptic Drugs
  - Often a Phenobarbital derivative
- Surgery
  - Usually done with focal point seizures
    - Problem – often return due to scar tissue
  - Also use desensitization and relaxation training
- Change thoughts