Depression in Late Life

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Presented by: **Ontario's Geriatric Steering Committee**

Key Learnings

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Key Learnings

- By the end of the session, participants will be able to
  - List the symptoms of depression
  - List 3 treatment modalities
  - List 3 side effects of antidepressants in the elderly

Outline

- Common Causes
- Assessment
- Management
- Implications for Practice

Prevalence of Geriatric Depression

- 4.4% in women, 2.7% in men for Major Depression (Cache County 2000)
- Sub threshold depression = 31.1%
- Worsens quality of life and health
- Increased service utilization and cost expenditure

Common Causes

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Biopsychosocial

- Biological Factors
  - Genetics and medical illness
- Psychological vulnerability
- Social Circumstances
  - E.g., loss, moving, retirement…

Conditions Associated with Late Life Depression

- Arthritis
- Sensory loss
- Urinary tract/prostate disease
- Obesity
- Chronic Pain
- Diabetes
- Cerebrovascular disease
- Silent infarct
- Parkinson's
- Myocardial infarction
- CAD
- Cardiac catheterization

Medications Associated with Late Life Depression

- Cimetidine
- Clonidine
- Hydralazine
- Estrogens
- Progesterone
- Tamoxifen
- Vinblastine
- Vincristine
- Methyldopa
- Benzodiazepines
- Propranolol
- Reserpine
- Steroids
- Anti-Parkinsonian agents
- Beta- blockers

Vascular Depression

- Depression – executive dysfunction syndrome
- Disruption of frontal-striatal circuits
- Symptoms
  - Apathy
  - Anhedonia
  - Executive dysfunction
  - Psychomotor retardation
- Poor response to Rx

Depression and Dementia

- Early and late-onset Depression increases the risk of dementia

- 2 meta analyses (Jorm 2001, Ownby 2006)
  - Case control and prospective studies
  - Risk increases **2-fold**

Hypotheses

1. Depression causes hippocampal damage
2. Prodrome to dementia
3. Depression as neuropsychiatric symptoms of dementia
4. Dementia and depression have common risk factors (vascular)
5. Depression as a reaction to dementia

Assessment

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Differential Diagnosis

- Major Depressive Disorder
- Bipolar Depression
- Persistent Depressive Disorder (dysthymia)
- Adjustment Disorder with Depressed Mood
- Substance/Medication Induced Depressive Disorder
- Depressive Disorder due to Another Medical Condition
- Bereavement

Symptoms of Major Depression

- *Depressed/empty
- *Anhedonia
- Sleep (less or more)
- Appetite (less or more)
- Reduced energy
- Poor concentration
- Guilt or worthlessness
- Psychomotor slowing or restlessness
- Thoughts of death or suicide
- Distress or impairment in functioning X 2 weeks

Symptoms of Major Depression

S: sleep
I: interest
G: guilt/worthlessness
E: energy
C: concentration
A: appetite
P: psychomotor
S: suicidal thoughts

Presentation

- More likely
  - Anhedonia
  - Cognitive complaints
  - Somatic symptoms
  - Vegetative symptoms
  - Irritability
  - Social withdrawal
- Less likely
  - depressed mood
  - Guilt/worthlessness

Subtypes

- Depression with psychotic features
  - Hallucinations
  - Delusions
- Depression with seasonal pattern
- Depression with anxious distress

"Anxious Depression"

- Anxious Distress:
  - 2 of: keyed up/tense, restless, concentration, fear that something awful will happen, feelings of losing control

- Compared to non-anxious depression
  - Predicts cognitive decline
  - Predicts suicide risk

- Poor prognosis
- Treatment implications

Bereavement

- Feelings of emptiness and loss
- Waves or pangs that decrease over days to weeks; assoc with reminders
- Can have positive emotions or humour
- Thoughts about deceased
- Self-esteem preserved
- Join the deceased

Assessment

- Collateral History
- Safety
- Physical exam
- Bloodwork
  - CBC, Lytes, Thyroid, B12, Calcium
- Imaging
- Driving

Rating Scales

- Geriatric Depression Scale
  - 15 item
- PHQ -9 - Patient Health Questionnaire
- MADRS – Montgomery Asperg Depression Scale
- Beck Depression Inventory

Management

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Treatment

- Pharmacotherapy
- Psychotherapy
- Other somatic treatments

Start low and go slow

- Start at ¼ to ½ the usual adult starting dose
- Increase the dose slowly, in small increments
- Example
  - Citalopram 10mg starting dose (or 5 mg in some..) and increase by 10 mg increments

Antidepressants

- Response rates – 48%, remission 33.7% [a]
- Evidence from Randomized Placebo Controlled Trials exists for:
  - Fluoxetine
  - Paroxetine
  - Sertraline
  - Duloxetine

Maintenance

- Maintenance studies
  - NNT to prevent 1 recurrence in 2 years is 4
  - Recurrence rates are high; up to 90% in 3 years in 1 seminal study

Serotonin Reuptake Inhibitors

- Sertraline (25-200mg)
- Citalopram (Qtc) (5-20mg)
- Escitalopram (Qtc) (5-10mg)
- Paroxetine (drug interactions, anticholinergic)
  - 10-40mg
- Fluoxetine (drug interactions) (10-40mg)
- Fluvoxamine (drug interactions) (25-200mg)

Other Antidepressants

- SNRIs: venlafaxine (37.5-300mg), duloxetine (30-120mg)
  - Hyponatremia, hypertension, orthostatic hypotension)
- Bupropion SR/XL (100-450mg)
  - Drug interactions, tremor, agitation
- Mirtazapine (7.5-45mg)
  - Anti-histaminic, very sedating, weight gain

Side Effects

- GI Bleeding
  - SSRI
- Hyponatremia
  - SSRI, SNRI
- Falls
- Qtc

Treatment resistant depression

- 2/3 do not remit with 1 trial
- Step 1 – check adherence
- Adequate trial? 6 weeks at therapeutic dose
- If in partial remission
  - Psychotherapy
  - Pharmacotherapy

Augmentation

- Atypicals
  - *Quetiapine XR (Katilla et al., 2013)
    - Monotherapy
  - Aripirazole
  - Olanzapine, risperidone
- Lithium
  - 0.4 to 0.8 mmol/L
- T3
- Methylphenidate

Combinations

- Combine antidepressants with different mechanisms of action, never an MAOI
- Mirtazapine +
  - SSRI, SNRI, TCA, bupropion
- Bupropion +
  - SSRI, SNRI, TCA (drug interaction), mirtazapine
- TCA + SSRI

Electroconvulsive Therapy

- Procedure
- Efficacy
  - Remission rates of 75% or higher in MDD
- Risks
  - Meta-analysis of 2981 patients shows cognitive impairment 3 days post-treatment, improves above baseline by day 15

Psychotherapy

- Best evidence
  - Cognitive Behavioural Therapy
  - Problem Solving Therapy
- Interpersonal Therapy
- Group, family, supportive, dynamic

Implications for Practice

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Implications for Practice

- Depression is common in late life and has serious consequences
- Cognitive and Medical workup
- Treatment requires patience and persistence
- Watch for pharmacokinetic and pharmacodynamic drug interactions
- Multimodal treatment

Guidelines

- CCSMH
  - Canadian Coalition for Seniors Mental Health
  - http://www.ccsmh.ca/en/default.cfm

Thank you!

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