



GSH-HIV
Mental Health Group

POST STROKE DEPRESSION

UCT DEPARTMENT OF PSYCHIATRY AND MENTAL HEALTH
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WOMENS MENTAL HEALTH

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STROKE



- 3rd most common cause of death (CAD and CA)
- 85% ischaemic
- 15 mil per year
- 1/3 die; 1/3 disabled
- Women: later and more severe

...and women are more likely to survive!

DEPRESSION: 1/3 within 5 years post CVA

CATASTROPHIC REACTIONS



PSYCHOSIS



ANXIETY

MANIA



SLEEP

PATHOLOGICAL DISPLAYS OF EMOTION

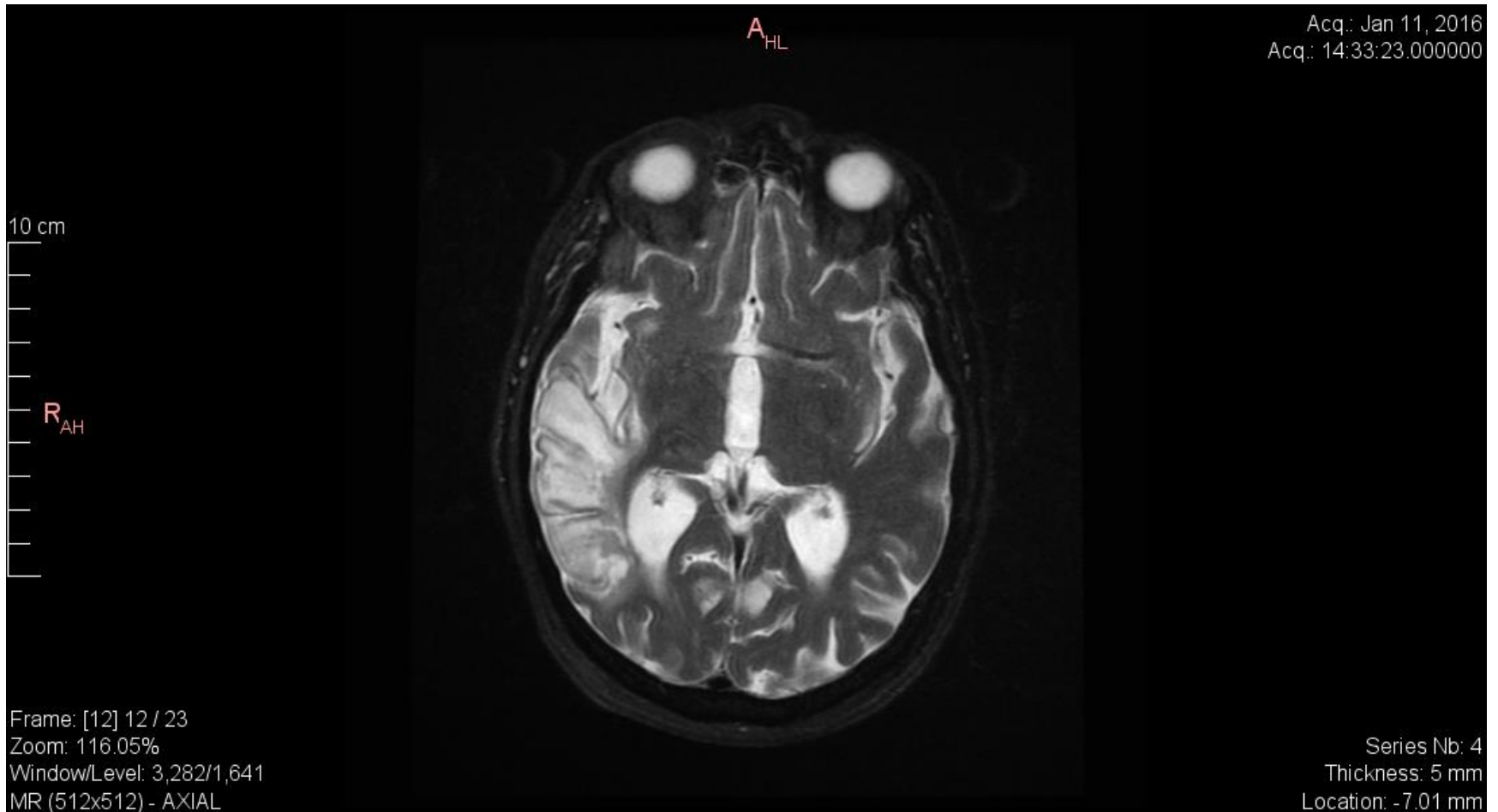
COGNITIVE IMPAIRMENT

FATIGUE

SEX

**SEVERE IMPAIRMENT; NEGATIVE IMPACT ON RECOVERY AND
CAREGIVER BURNOUT**

A CASE: MRS O



PSD: MAKING THE DIAGNOSIS

Major Depressive Disorder

296.xx (F32.x and F33.x)

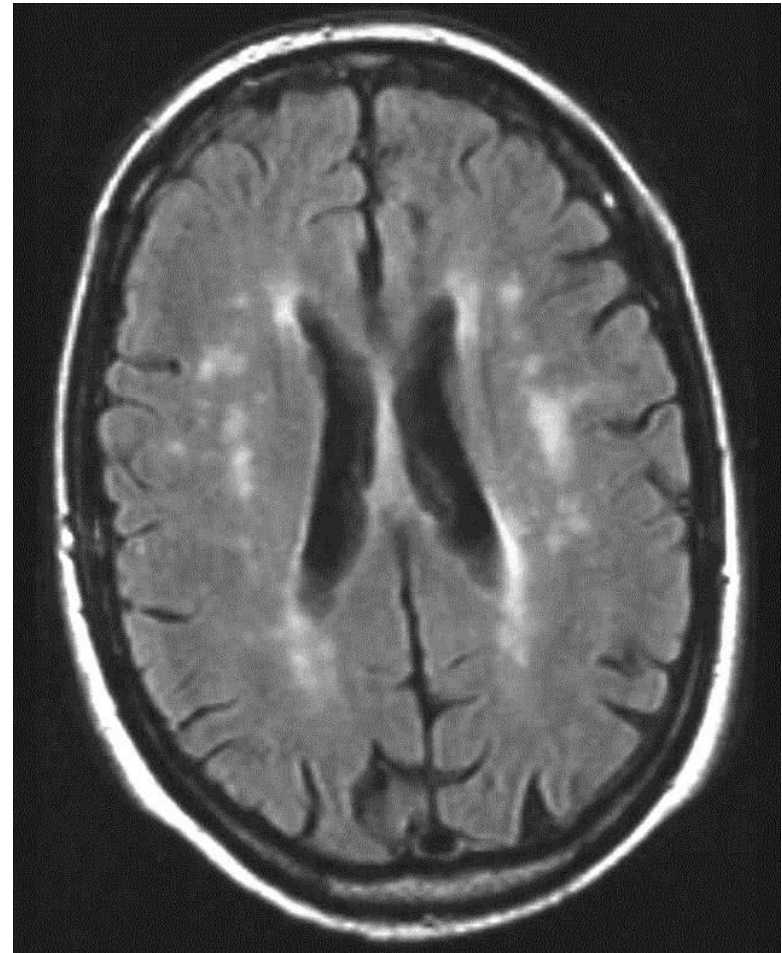
- A. Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure.**

Note: Do not include symptoms that are clearly attributable to another medical condition.

1. Depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad, empty, hopeless) or observation made by others (e.g., appears tearful). (**Note:** In children and adolescents, can be irritable mood.)
2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation.)
3. Significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day. (**Note:** In children, consider failure to make expected weight gain.)
4. Insomnia or hypersomnia nearly every day.
5. Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down).
6. Fatigue or loss of energy nearly every day.
7. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick).
8. Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others).
9. Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.

PSD vs “VASCULAR DEPRESSION”

- Depression + subcortical pathology + WM hyper intensities on MRI
- Clinical features:
 - Older
 - ++ cognitive impairment
 - ↓ family history
 - ↑ physical impairment
 - Treatment resistance



WHO IS AT RISK?



- Functional and cognitive impairment
- Diabetes
- Past hx anxiety and depression
- Family hx
- Severity of stroke
- ? location
- ? Female
- ? Speech as a biomarker

AETIOLOGY

REACTION vs BRAIN INJURY



Bi-directional relationship:

Depression ↔ disability



PATHOPHYS.

- Disruption of monoamine systems
- HPA axis abnormalities
- Disruption of frontal-subcortical circuits
- Alterations in neuroplasticity and glutamatergic neurotransmission
- Excess of pro-inflammatory cytokines.

WHAT IS THE COST OF PSD?



- Higher mortality rates
- Impaired ADLs
- Cognitive impairment

PHARMACOTHERAPY



- AHA: all patients with PSD for ≥ 6 months
- Psychotherapy equivalent to controls
- Associated risks:
 - Bleeding
 - Falls
- Consider medical comorbidity and drug interactions



PHARMACOTHERAPY cont.

- Fluoxetine; citalopram; nortriptyline = safe and effective
- Warfarin: use citalopram/escitalopram
- Caution with other anticoagulants
- Consider a PPI
- Mianserin/mirtazapine appear ineffective
- Pain: amitriptyline

OTHER MEDICATION OPTIONS



- Methylphenidate: some efficacy with mood and cognition in PSD (5-40mg) daily.
- Agomelatine
- Lithium



NON-PHARMACOLOGICAL

- ECT – controversial
- TMS: some promising preliminary evidence
- Carotid angioplasty: one group reported that stenting the CA was more effective than antidepressant treatment.
- Evidence is poor for psychotherapy, however, brief psychosocial therapies are an option
- Music therapy:
 - biweekly music sessions for 6 weeks
 - cost effective strategy which integrates cognitive; emotional and sensorimotor brain functions
 - Improvements: motor function; well being; mood and, so far, the effects seem to be pretty robust holding at one-year follow up.
 - Enhanced social interaction in groups



PREVENTION

- 58 non-depressed; acute stroke (escitalopram 5mg or 20mg if <65): PSD 8.5% vs 11.9% (receiving problem-solving therapy) and 22.4% receiving placebo.
- Meta-analysis (N=776 non-depressed patients): PSD reduced in active treatment arm, especially >1 yr. of treatment and those using an SSRI. No significant active and placebo group differences with regards to side effects.
- 2017: Korean RCT (17 centers, N=405): escitalopram 10mg vs placebo in acute stroke, **did not show any benefit** (to reduce moderate of severe symptoms of depression)



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