



March Grand Rounds  
Department of Family and Community Medicine

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Dr. Shah has done numerous media presentations to National and International Radio/TV/Newspapers and has widely presented both nationally and internationally and has over 100 published papers.

Teaching and Evaluation, Fulbright and Jaworski Awards in 2012,

Educational Leadership, Fulbright and Jaworski Awards in 2014.

Rising Star Clinician Award in 2014.

Houstonia magazine Top Doctors list in 2013, 2014 and 2015, 2017.

Castle Connolly's Top Doctor Award for 2017, 2018 & 2019.

Children Mental Health Champion Award from Mental Health America in 2018.



# Tackling Depression & Anxiety in Primary Care

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# Disclosure Information

Dr. Asim Shah has reported no interest or other relationship(s) with commercial interests (drug/device companies) that may relate to the educational content of this activity

# Objectives

- \* Learn sign and symptoms of depression
- \* Discuss management of depression
- \* Learn sign and symptoms of anxiety
- \* Discuss management of anxiety

# Pre Test Quiz: 1

## How long should we treat Depression?

- \* 1. Forever
- \* 2. One year
- \* 3. Depends on number of episodes
- \* 4. Two years

# Pre Test Quiz: 2

**What is the most common long term risk factor for suicide?**

- \* 1. Mental Illness
- \* 2. Alcohol use
- \* 3. Prior suicide attempt
- \* 4. Poor health

# Pre Test Quiz: 3

**What percentage of patient with depression have anxiety?**

- \* 100%
- \* None
- \* 30%
- \* 60%



# How long to treat?

- \* First Episode- > 50% chance of relapse in first 9 months
- \* Second Episode- > 70% chance of relapse in first 2 years
- \* Three or more Episodes-> 80-90% chance of relapse.

# Treatment Options

## \* **Psychotherapy**

- \* Cognitive Behavioral Therapy
- \* Psychodynamic/Analytic
- \* Interpersonal
- \* Supportive

## \* **Other Options**

- \* ECT
- \* Phototherapy
- \* VNS
- \* TMS



## \* Medication Treatment

- \* TCA's
- \* MAO'I
- \* SSRI's
- \* SNRI's
- \* Multiple Receptor

# ECT

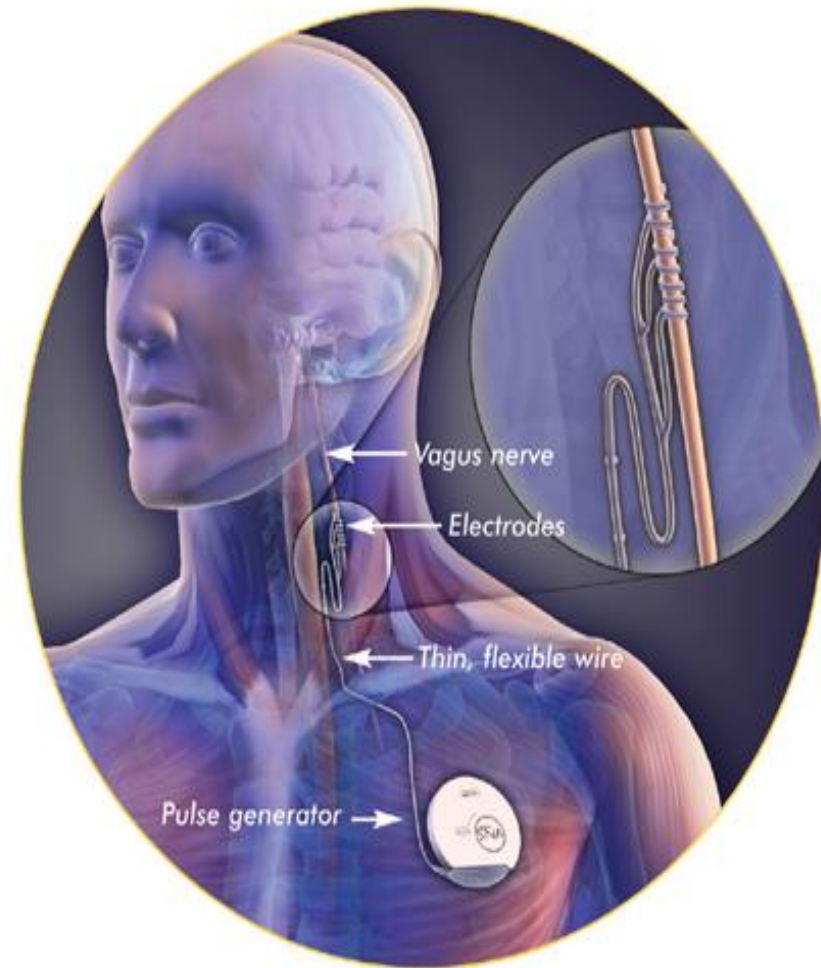
- \* **Major Depressive Disorder; Bipolar I Disorder, depressed, mixed, manic**
- \* **Psychotic schizophrenic** exacerbation in the following situations:
  - \* Catatonic (also catatonia of any etiology)
  - \* When affective symptomatology is prominent
  - \* When there is a history of favorable response to ECT
- \* Situations in which ECT may be used prior to trial of psychotropic
  - \* Need for rapid response on either medical or psychiatric grounds
  - \* Risks of other treatments outweigh the risks of ECT (pregnancy, etc)
  - \* History of poor drug response and/or good ECT response Patient preference
- \* After a trial of an alternative treatment, referral for ECT should be based on treatment failure
- \* Other conditions: Parkinson's disease, intractable seizures, NMS

# PHOTOTHERAPY



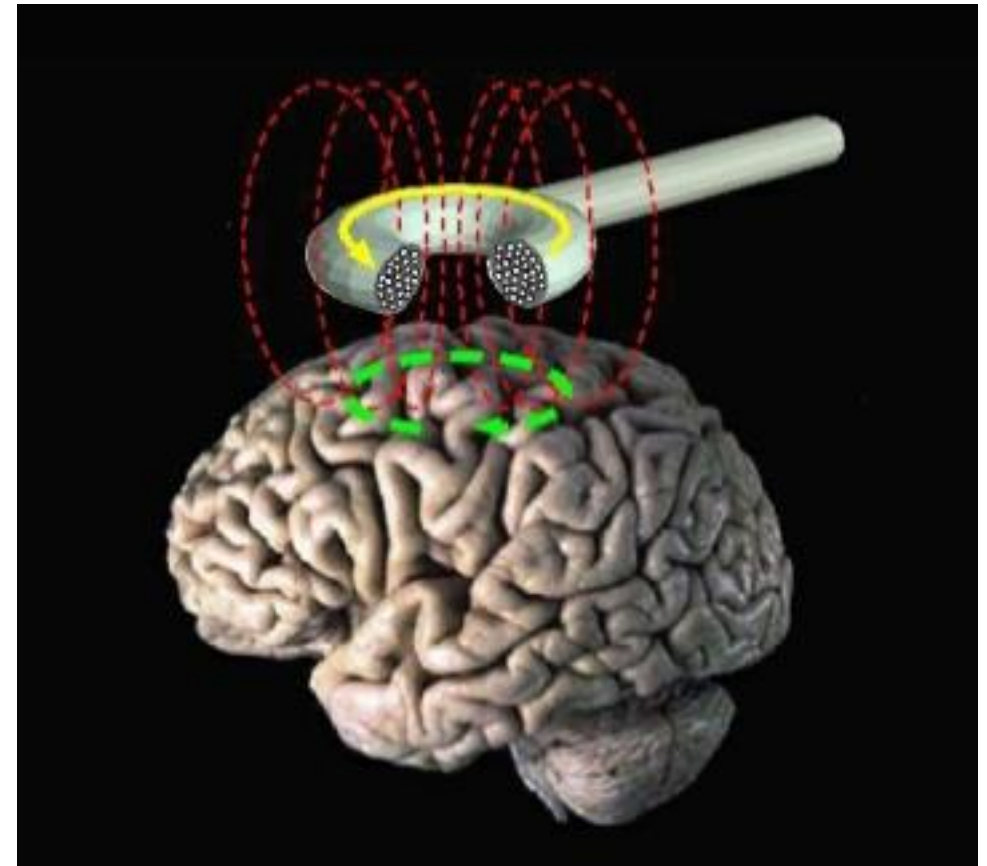
# Vagus Nerve Therapy

- \* Approved by FDA for TRD
  - \* Unipolar or Bipolar Depression
  - \* Long term depression (> 2 yrs)
  - \* Recurrent Depression
  - \* With or without history of ECT
  - \* Patients who have not had adequate response to 4 or more treatments



# TMS

- \* No seizures
- \* No systemic side effects
  - \* No weight gain
  - \* No sexual dysfunction
  - \* No sedation
  - \* No nausea
  - \* No dry mouth
- \* No adverse effects on concentration/memory
- \* No device-drug interactions



# ANTIDEPRESSANTS/TRICYCLICS/ETC

- \* AMITRIPTYLINE/ELAVIL
- \* DOXEPIN/SINEQUAN
- \* IMIPRAMINE/TOFRANIL
- \* TRAZODONE/DESYREL (NOT A TCA)



# ANTIDEPRESSANTS/SSRI'S (selective serotonin reuptake inhibitor)


- \* Fluoxetine (PROZAC)
- \* Paroxetine (PAXIL)
- \* Sertraline (ZOLOFT)
- \* Citalopram (CELEXA)
- \* Escitalopram (LEXAPRO)

# ANTIDEPRESSANTS/MULTIPLE RECEPTOR

- \* Bupropion (WELLBUTRIN SR/ XL)
- \* Mirtazapine (REMERON)
- \* Venlafaxine (EFFEXOR XR)
- \* Duloxetine (CYMBALTA)
- \* Desvenlafaxine (PRISTIQ)
- \* Trazodone (OLEPTRO)
- \* Vilazadone (VIIBRYD)
- \* Vortioxetine (TRINTELLIX)
- \* Levomilnacipran (FETZIMA)

# Case 1


- \* 32 year old man is referred for medication management by his therapist. He has a Master's degree in business administration from a prestigious business school and is currently working at a large firm as a mid-level manager. He complains about being 'depressed' about 'everything': his job, his girlfriend and his future prospects. He has been in psychotherapy since starting college and continuing through graduate school until now. He complains of persistent feelings of pessimism and inferiority, low mood, and constantly ruminating about people who are 'better than me'.



.....These feelings have been present (as far as he can remember) since he was about 15 or 16. He reports that therapy has helped him in the past but that 'it never really goes away'. Recently, he has been having difficulties at work. He thinks his boss is unfair and self-centered and was recently passed over (twice) for promotion which he feels is unfair although he admits that he performs his assignments halfheartedly, never does more than is absolutely required and never takes any initiative.

## Case 2


32 year old man is referred for medication management by his therapist. He has a Master's degree in business administration from a prestigious business school and is currently working at a large firm as a mid-level manager. He complains about being 'depressed' about 'everything': his job, his girlfriend and his future prospects. He has been in psychotherapy since starting college and continuing through graduate school until now. He complains of persistent feelings of pessimism and inferiority, low mood, and constantly ruminating about people who are 'better than me'.



.....These feelings have been present (as far as he can remember) since he was about 15 or 16. He reports that he cant sleep well, an when he tried antidepressants they caused sexual side effects, so he stopped them. Recently, he has been having difficulties at work. He thinks his boss is unfair and self-centered and was recently passed over (twice) for promotion which he feels is unfair although he admits that he performs his assignments halfheartedly, never does more than is absolutely required and never takes any initiative.

# Case 3

- \* 32 year old man is referred for medication management by his therapist. He has a Master's degree in business administration from a prestigious business school and is currently working at a large firm as a mid-level manager. He complains about being 'depressed' about 'everything': his job, his girlfriend and his future prospects. He has been in psychotherapy since starting college and continuing through graduate school until now. He complains of persistent feelings of pessimism and inferiority, low mood, **and lack of energy and lack of motivation.**



..... He tried antidepressants in the past but stopped due to sexual side effects and weight gain. Denies any panic symptoms. Recently, he has been having difficulties at work. He thinks his boss is unfair and self-centered and was recently passed over (twice) for promotion which he feels is unfair although he admits that he performs his assignments halfheartedly, never does more than is absolutely required and never takes any initiative.



# FDA warning about Suicide & Antidepressants

- \* Any one less than 24 years, if given antidepressants, can have suicidal ideations
- \* No risk of suicidal ideations between 25-65 years of age
- \* Beneficial if given to any one over 65 years of age

# Antidepressants can cause Withdrawals

- \* **GI Symptoms**      nausea, vomiting, diarrhea
- \* **Affective Symptoms**      irritability, anxiety/agitation, low mood
- \* **Disequilibrium**      lightheadedness/dizziness, vertigo, vertigo, ataxia
- \* **Sensory Symptoms**      paresthesia, numbness, electric shock like sensations
- \* **Somatic Symptoms**      lethargy, headache, tremor, sweating, anorexia
- \* **Sleep Disturbance**      insomnia, nightmares, excessive dreams


- \* Worst with Paxil
- \* Followed by Effexor, Cymbalta, Pristiq
- \* Intermediate with Zoloft, Lexapro, Celexa,
- \* Lowest with Prozac
- \* No discontinuation symptoms with Remeron/Mirtazapine, Wellbutrin

# What is New in Research for Depression

- \* Ketamine IV
- \* Glutamate/NMDA
- \* Deep Brain Stimulation
- \* Intra-nasal Ketamine

# Case 4


- \* A 25-year-old woman presented to a psychiatrist for evaluation of “paranoia.” Her husband stated that she had always been suspicious that something would go wrong, and, thus, he considered her paranoid. The patient had been married for 6 years and had three daughters, one with congenital heart disease. Although her two younger daughters attended preschool, the older daughter, who was 5 years old, was too sick to attend school. The patient cared for her daughter at home and attended numerous medical appointments. Her husband noted that she was always worried that something bad was going to happen to their 5 year old.



.....The patient also would become very worried if the other daughters came come late for any reason, even if the carpool was late dropping them off due to traffic congestion. The patient had no symptoms of psychosis (ie, no auditory or visual hallucinations, no paranoia, and no thought-content abnormalities). It was noted that, while talking about her family, she would become worried rather easily and could not control her worry in spite of all assurances. However, no paranoia (false beliefs of persecution, threat, or conspiracy toward self) was noted. She was also noted to have a constricted affect and had depressed mood associated with poor quality of sleep and fatigue.

# Comments

- \* This patient had generalized anxiety disorder. While her husband referred to the patient as paranoid, her symptoms were truly ones of excessive worry and out of proportion to what one may objectively expect. This patient's anxiety had been occurring for more than 1 year and fit the diagnostic criteria for generalized anxiety disorder. She was started on escitalopram 10 mg daily, which is a US Food and Drug Administration (FDA) approved treatment of generalized anxiety disorder.



..... While the patient responded to treatment and her anxiety and excessive worry decreased, her symptoms did not fully resolve. Since she had some important social factors, such as her daughter's illness, contributing to her anxiety, weekly cognitive-behavioral therapy sessions were added to her treatment. After the completion of cognitive-behavioral therapy, the patient improved tremendously. Her anxiety and worry were under control, and the patient continued to take escitalopram 10 mg daily with good results.



# Pharmacotherapy for Anxiety

- \* SSRI's
  - \* SNRI's
  - \* TCA's
  - \* MAOI's
  - \* Benzodiazepines
  - \* Other agents like buspar and hydroxyzine
- 
- \* A 2012 International Narcotics Control Board report notes that alprazolam is the world's most manufactured psychotropic substance.\*

\* Shah Asim, Jin Han, "Anxiety Disorders: Subtypes, Diagnosis, Treatment and Neurological Comorbidities" Continuum in Neurology, A lifelong learning, June 2015. (CONTINUUM: Lifelong Learning in Neurology: [June 2015 - Volume 21 - Issue 3, Behavioral Neurology and Neuropsychiatry - p 772-782](#)  
DOI: 10.1212/01.CON.0000466665.12779.dc

**TABLE 11-2 List of US Food and Drug Administration–Approved Drugs for Anxiety Disorders**

Disorder and Medication	Class <sup>a</sup>	Dose Range	Comments <sup>a</sup>
<b>Panic disorder</b>			
Fluoxetine	Selective serotonin reuptake inhibitor (SSRI)	10–60 mg/d	Activating Long half-life Drug interaction is common
Paroxetine	SSRI	10–60 mg/d	Somnolence Short half-life Anticholinergic effect Drug interaction is common
Sertraline	SSRI	25–200 mg/d	Gastrointestinal discomfort Activating
Venlafaxine extended release	Serotonin norepinephrine reuptake inhibitor (SNRI)	37.5–225 mg/d	Dose-dependent blood pressure elevation Activating
Alprazolam	Benzodiazepine	0.5–2 mg/d	Potential for abuse Short half-life
Clonazepam	Benzodiazepine	0.25–2 mg 2 times/d	Potential for withdrawal Long acting Potential for abuse
<b>Social anxiety</b>			
Paroxetine	SSRI	10–60 mg/d	Somnolence Short half-life Anticholinergic effect Drug interaction is common
Sertraline	SSRI	25–200 mg/d	Gastrointestinal discomfort Activating
Venlafaxine extended release	SNRI	37.5–225 mg/d	Dose-dependent blood pressure elevation Activating
<b>Generalized anxiety disorder</b>			
Escitalopram	SSRI	10–20mg/d	Negligible drug interaction Good tolerability
Paroxetine	SSRI	10–60 mg/d	Somnolence Short half-life Anticholinergic effect Drug interaction is common
Venlafaxine extended release	SNRI	37.5–225 mg/d	Dose-dependent blood pressure elevation Activating
Duloxetine	SNRI	30–120 mg/d	FDA-approved for fibromyalgia, diabetic neuropathy, chronic musculoskeletal pain
Bupirone	Azapirone	7.5–30 mg 2 times/d	No abuse potential

<sup>a</sup> All SSRIs and SNRIs can cause gastrointestinal disturbance and sexual dysfunction.

# Post Test Quiz: 1

## How long should we treat Depression?

- \* 1. Forever
- \* 2. One year
- \* 3. Depends on number of episodes
- \* 4. Two years

# Post Test Quiz: 2

## **What is the most common long term risk factor for suicide?**

- \* 1. Mental Illness
- \* 2. Alcohol use
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- \* 4. Poor health

# Post Test Quiz: 3

**What percentage of patient with depression have anxiety?**

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- \* None
- \* 30%
- \* 60%

# Conclusion

- \* Depression and anxiety co occur in over 60% of patients
- \* Depression should be treated forever if patient has over three episodes of clinical depression
- \* Prior history of suicide is the most significant long term risk factor for future suicide
- \* SSRI and good first line for anxiety treatment for longer periods

Questions?