

Jeopardy

for MHD &
Therapeutics

**And Now Here
Is The Host . . .**

FLIPPIAROLI

Insert Name Here

The categories for today's
Jeopardy will be:

SSRI's

SNRI's

Atypical Antidepressants

MAOI's

TCA's

SSRI's

SNRI's

Atypical Antidepressants

MAO-I's

TCA's

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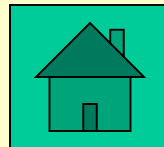
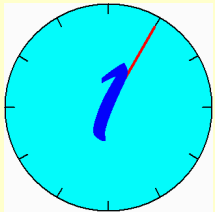
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What is **fluoxetine (prozac)**?

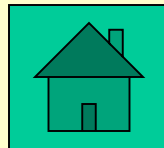
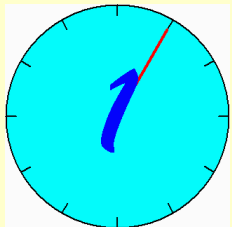
**The half-life of this SSRI is
about one week**



Row 1, Col 1

What is Selective Serotonin Reuptake Inhibitor?

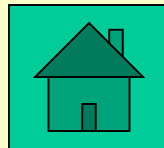
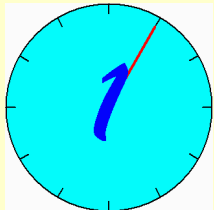
SSRI is the abbreviation for this



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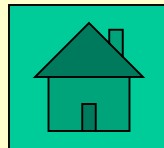
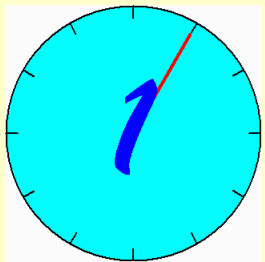
What is **Discontinuation Syndrome**?

**If an SSRI with a short half life
is abruptly stopped it
may result in this**



What is half life (wait 5 half lives)?

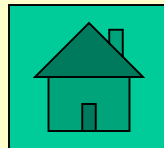
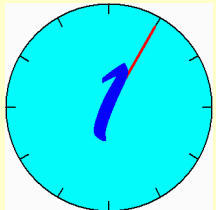
When switching to a MAOI from an SSRI, info about this pharmacokinetic property of the SSRI will provide guidance on how long of a washout is needed before starting the MAOI



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What is safety from overdose?

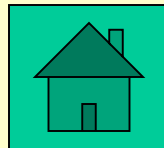
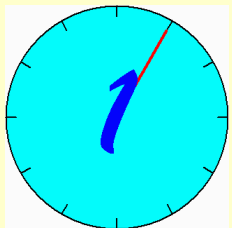
Arguable the single biggest improvement of SSRI's over their TCA predecessors is this



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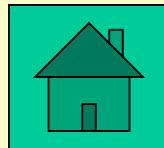
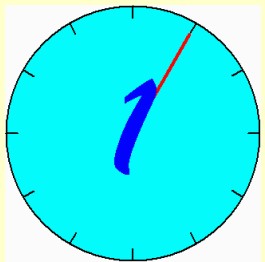
What is a sertraline (Zoloft)?

SSRI's include Fluoxetine (Prozac), Paroxetine (Paxil), Citalopram (Celexa), Escitalopram (Lexapro), Fluvoxamine (Luvox), and this



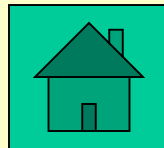
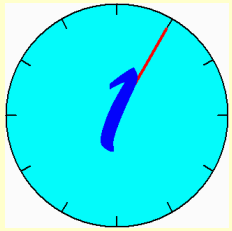
What is escitalopram (lexapro)?

This SSRI is the S-enantiomer of  citalopram (celexa)



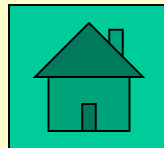
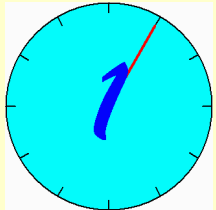
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These two SSRI's have very short half lives & should be tapered to be discontinued



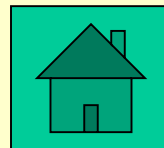
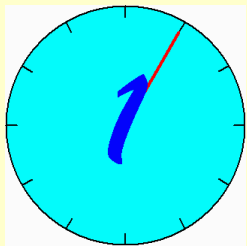
What are sexual side effects?

This is a common side effect of all SSRI's & the doctor should specifically ask about it as the patient may otherwise be too embarrassed to talk about it



What is Serotonin Norepinephrine Reuptake Inhibitor?

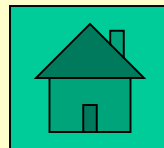
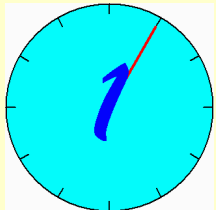
**The mechanism of action of
SNRI's is this**



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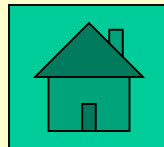
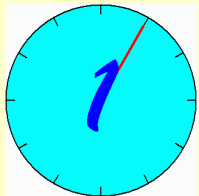
What is desvenlafaxine (pristiq)

**This SNRI is the psychoactive
metabolite of another SNRI**



What is serotonin?

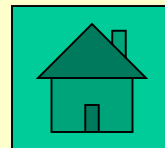
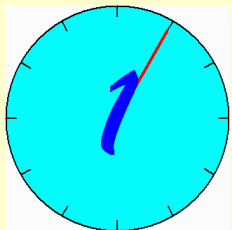
**Whether the dose is very high,
moderate, or low, this
neurotransmitter's reuptake is
blocked by venlafaxine (effexor)**



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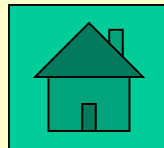
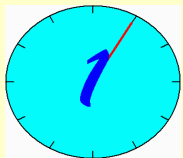
What is dopamine?

**At very high doses ($>375\text{mg/d}$)
of venlafaxine (effexor) this
neurotransmitter's reuptake
may begin to be blocked**



What is duloxetine (cymbalta)

This SNRI is preferred for painful symptoms of depression or diabetic neuropathy pain

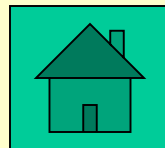
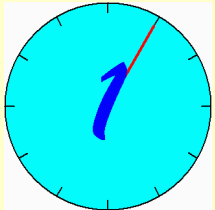


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What is TCA's?

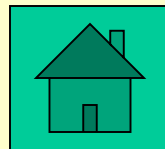
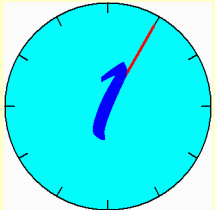
SSRI's MAOI's TCA's

**Venlafaxine (Effexor)'s mechanism
of action is most similar to this
class of antidepressants**



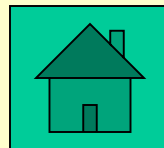
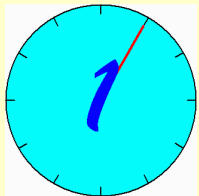
What is discontinuation syndrome?

**When stopping venlafaxine (effexor)
it should be gradually tapered in
order to avoid this**



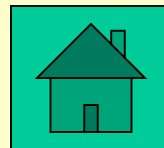
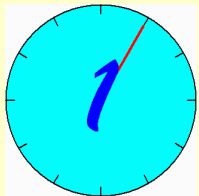
What is NE reuptake inhibition?

The SNRI side effect of diaphoresis  is due to this



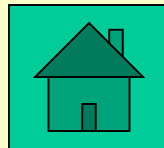
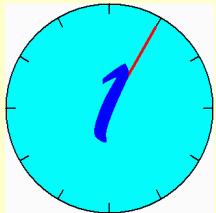
What is increased blood pressure?

**Venlafaxine (effexor) has
this relatively common, dose
dependent, cardiac system
related side effect**



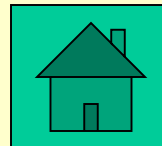
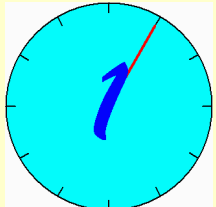
What is **GI side effects?** (nausea, diarrhea, stomach cramps)?

**SSRIs or venlafaxine (effexor) may
cause these common side effects
which mirtazepine's (remeron)
5HT₃ antagonism may help
reduce or remove**



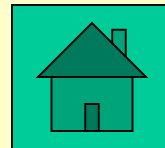
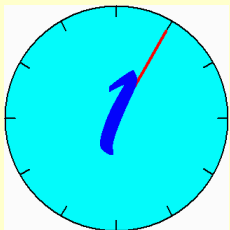
What is nicotine (smoking cessation)?

**Marketed under the name Zyban,
(Bupropion) is useful in treating
cravings from dependence
on this substance**



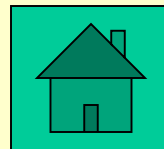
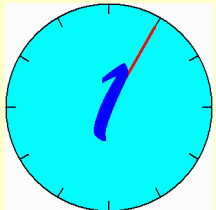
What is sexual dysfunction?

Mirtazepine (Remeron)'s 5HT_{2A} antagonist activity & Wellbutrin (Bupropion)'s lack of any 5-HT activity is why neither has this common SSRI side effect



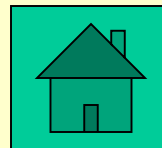
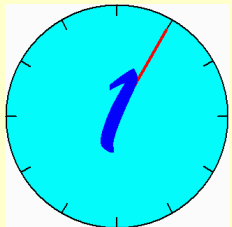
What is a seizure?

Like most anti-depressants, at typical doses bupropion (wellbutrin) carries a small risk of this serious side effect but the risk increases from 0.4% to 4% at very high doses



What are vortioxetine (Brintellix)?

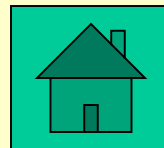
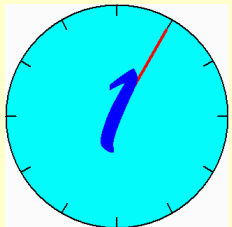
**In the evolution of antidepressants,
drugs that are SSRI's with 5-HT
receptor antagonists or partial
agonists are vilazodone (viibryd)
and this**



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What is pre-synaptic alpha 2 adrenergic antagonist?

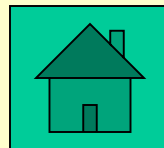
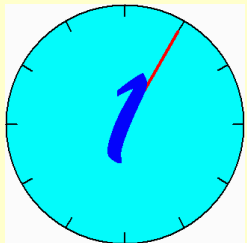
Mirtazepine (Remeron)'s novel mechanism of action by which norepinephrine and serotonin system activity is increased is this



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What is slightly decrease? (or no change)

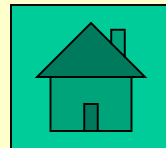
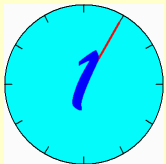
Bupropion (Wellbutrin) commonly  does this to a patient's weight



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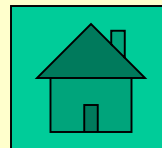
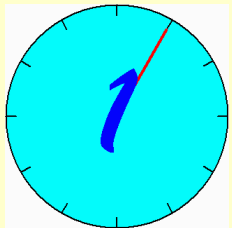
What is weight gain?

This mirtazapine (remeron) side effect is more likely in women than men, before menopause than after, and is unlikely to be a problem if it has not occurred within the first 6 weeks of treatment



What is 2-4 weeks

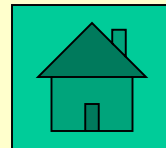
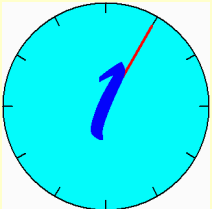
**Onset of therapeutic action is usually
not immediate, but is delayed
until this time period**




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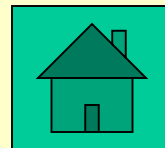
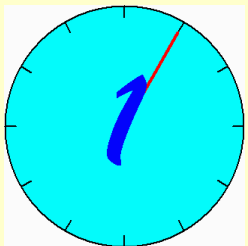
What is serotonin syndrome?

SSRI's and MAOI's used in combination carry a high risk of this side effect



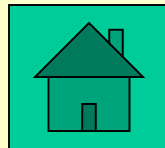
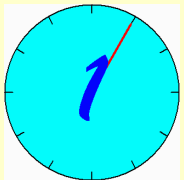
What is MAO-A?

While there are two MAOs (MAO-A & MAO-B), inactivating this one  appears necessary for the antidepressant effect



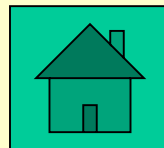
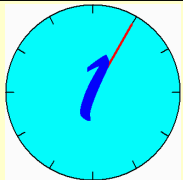
What is **Reversible Inhibitor of Monoamine Oxidase?**

**Regarding MAOI's, a RIMA
is this**



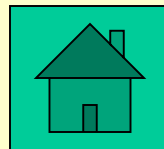
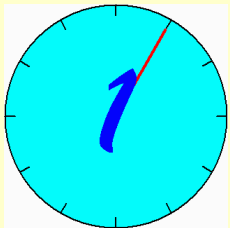
What are 10-14 days?

**While the $t_{1/2}$ is 2-4 hours,
the amount of time for most
MAO-I's to wash out
is this**



What is HTN crisis (from dietary tyramine)?

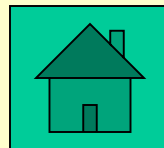
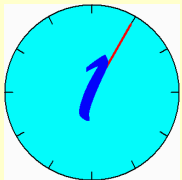
**At low doses, Selegiline (Emsam)'s
transdermal delivery greatly decreases
this possible side effect**



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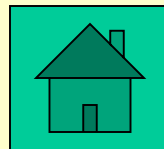
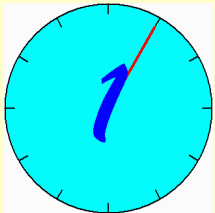
What is hypertensive crisis?

Patient's taking an MAOI need to avoid foods high in tyramine and sympathomimetic medications due to the risk of this



What is mitochondria?

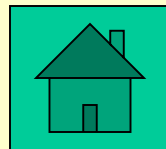
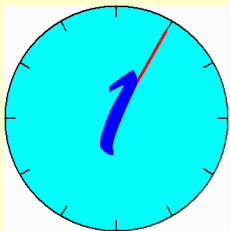
The cellular organelle containing the MAO enzyme that is inactivated by MAOI's is this



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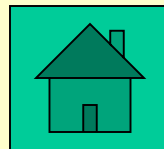
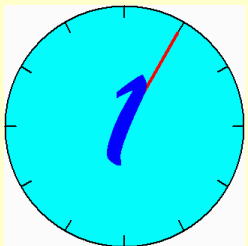
What is treatment resistant?

MAOI's are effective in treating depression with melancholic features, depression with atypical features, persistent depressive disorder, and this type of depression



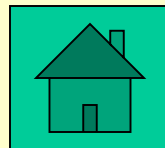
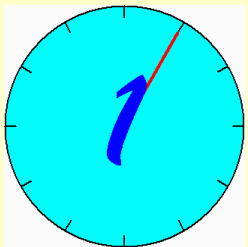
What is day-night shifting?

While MAOI's may result in serotonin related side effects such as GI distress, sexual dysfunction, and sleep disturbance, the unusual thing about the sleep disturbance is this



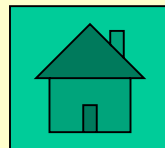
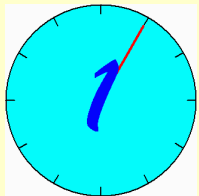
What is nortriptyline (pamelor)?

A tertiary amine, amitriptyline (elavil), is metabolized to a secondary amine which is this TCA



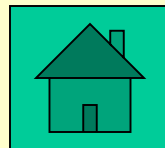
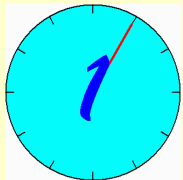
What is anticholinergic activity?

Blurred vision, urinary hesitancy, dry mouth, and constipation are due to this neurotransmitter receptor activity by TCA's



What is **desipramine (norpramin)**?

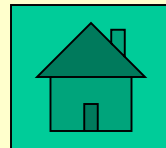
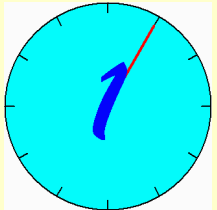
A tertiary amine, imipramine (tofranil), is metabolized to a secondary amine which is this TCA




5,3

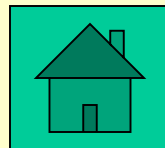
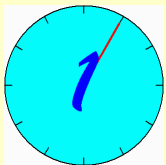
What are Imipramine & Amitriptyline (Tertiary TCs)?

Most TCA's preferentially block reuptake of NE vs 5-HT, but these 2 TCA's comparably block the reuptake of both NE & 5-HT



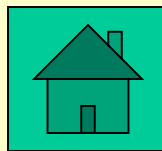
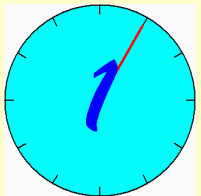
What is cytochrome p450 2D6?

Fluoxetine (prozac), paroxetine (paxil), bupropion (wellbutrin), duloxetine (cymbalta) and other medications may increase all TCA's concentration by inhibiting this p450 enzyme 



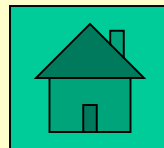
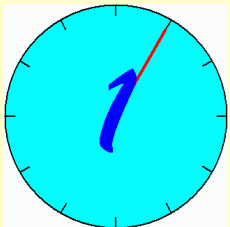
What is alpha adrenergic-1 receptor?

**Side effects of dizziness, sedation,
and hypotension likely result
from TCA's antagonist activity
of this receptor**



What is histamine (H1)?

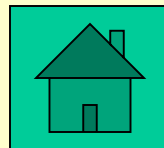
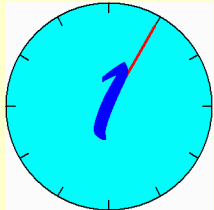
Side effects of sedation and weight gain from TCA's are likely due to antagonist activity at this receptor



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What is **serotonin and norepinephrine reuptake inhibition**?

TCA's mechanism of action for treating depression is this



5,8

What are sodium channels?

**The dangerous side effects from
a TCA overdose are cardiac
arrhythmias caused by
blockade of this**

