Psychiatric Treatment For Patients With Dual Diagnosis

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Bobby (Nonverbal Patient)

- 52 year old male with history of Profound ID, Autistic Disorder, cerebral palsy, and complete vision impairment
- For 4 months has exhibited agitation, verbal/ physical aggression, chanting, kicking, SIB and property destruction; has also begun gagging himself, and has shown a decrease in ADLs
- Decrease in appetite and weight loss of 13 pounds; began consuming inedible items, such as pieces of blankets, attends, and clothing
- Upon examination, rocking

Bobby

- Mother deceased 06/08 (history of CAD)
- Brother/guardian reportedly has CA
-
- **Medications:**
- Baclofen 10mg TID
- Diazepam 5mg QHS
- Naproxen 500mg BID

- Evaluated for admission to DC

David

- 38 year old male seen for intake 5/09
- History of Severe ID, ‘Mood Disorder NOS’
- Running, spinning, agitated and anxious at initial appointment
- In office less than 2 minutes before eloping to parking lot
- Staff requested no medication changes

David: Medication list 05/09

- Seroquel 25 mg four times daily
- Invega 9 mg once daily
- Betaxolol 10 mg twice daily
- Propranolol 40 mg twice daily
- Lexapro 5 mg once daily
- Clonidine 0.1 mg three times daily
- Imipramine 25 mg three times daily
- Buspirone 10 mg three times daily
- Cogentin 1 mg three times daily
- Ambien 10 mg once daily at bedtime

David: Medication list 09/09

- Seroquel 200 mg AM/400 mg PM
- Lexapro 5 mg once daily
- Ambien 10 mg once daily at bedtime

Scope of the Problem

- Aggressive behavior is present in 15 % of persons with MR/DD (Harris,1993;Sigafoo,1994)
- It is multi-determined and influenced by biological, psychological and social factors (Davidson, Cain 1994)

Impact of Aggression

- Individual
  - more restricted environment, unstable
  - reduced family involvement
- Caregiver
  - stress, burnout, injury
- Society
  - increased cost of hospitalization or incarceration

Biological Factors

- Family history of violence (learned vs. genetic?)
- Serotonin
- Norepinephrine
- GABA may have inhibitory effect on aggression
- Dopamine

Most Common Causes of Behavioral Problems

- Medical conditions (including chronic pain)
- Medication side effects
- Sleep disorders
- Psychiatric illnesses

Fist Jammed in Mouth

- Usually Gastroesophageal Reflux Disease
- (GERD)
- Also: eruption of teeth, asthma, rumination, nausea, anxiety, painful hands, gout

Biting thumb or object with front teeth

- Sinus problems (also the most common reason for thumb sucking and bruxism)
- Eustachian tube and ear problems
- Finger pain/paresthesias
- Gout

Odd unpleasurable masturbation

- Prostatitis
- Urinary tract or genital infection
- Rectal injury or infection
- Parasitic infection
- Old conditions… (syphilis…)
- Repetition phenomena (past abuse)
- Never learned pleasurable masturbation

Won't sit

- Akathisia
- Anxiety
- Depression
- Back pain
- Other pain
- Sleep deprivation

Whipping head forward

- Atlantoaxial instability (at risk are individuals with Down Syndrome and other syndromes that produce joint laxity)
- Dental problems
- Headaches

Head Banging

- This is not “normal” for anyone
- DEPRESSION
- Headache
- Dental
- Seizure
- Otitis/Mastoiditis
- Sinus problems
- Tinea capitus

Intense rocking

- **Not "normal" for the patient with ID**
- Visceral pain
- Headache
- Depression
- Anxiety
- Medication side effects

Co-Morbidity (Psychiatric diagnoses associated with aggression)

- Substance abuse disorders
- Psychotic disorders (especially Paranoia)
- Affective disorders
- Personality disorders (especially Antisocial, Borderline)
- Conduct disorder
- Oppositional defiant disorder
- Delirium, dementia

Medical Conditions (associated with aggression)

- Traumatic brain injury
- Intracranial pathology
- Metabolic conditions
- Systemic infections
- Environmental toxins
- Complex partial seizures
- Temporal lobe foci on abnormal EEG

Risk Factors

- **Static**: *Past violence*, male gender, younger adult age, cognitive deficits, brain injury, dissociative states, military service, weapons training, major mental illness

- **Dynamic:** persecutory delusions, command hallucinations, noncompliance, impulsivity, low GAF, homocidality, depression, hopelessness, suicidality, access to weapons

Aggression in Patients with ID

- Means of expressing frustration
- Learned problem behavior
- Expression of physical pain or acute medical condition
- Means of communication
- Signal of acute psychiatric problem
- Regression in situations of stress, pain, change in routine, or novelty

Violence in Patients with ID

- Dementia
- Loss of independence and/or physical functioning
- Grief and loss issues
- Escape or avoidance of unwanted demands or situations
- Attention seeking

Drew

- 28 year old male
- History Moderate ID, Obsessive Compulsive Disorder and Psychosis NOS
- Paranoia toward neighbor, panic attacks
- Medications:
- Celexa 60 mg daily
- Abilify 30 mg daily
- Cogentin 2 mg daily
- Depakote 500 mg twice daily

Bio-Psycho-Social Formulation

Bio-Psycho-Social Formulation

- A complete gathering of information through client interview, discussion with family members and/or caretakers, review of clinical records, and contact with collaborating agencies that leads to a formulation, diagnoses and treatment plan.

Biological Aspects

- Demographic data
- Medical illness
- Genetic predisposition
- Medications (past and present)
- Substance use

Biological Aspects

- 85% have untreated, under-treated or undiagnosed problems
- worsened by restrictions on care (labs, office visit frequency and length)
- medications used in ways they were never intended, in unsafe ways, with abbreviated monitoring protocols

Psychological Aspects

- Past abuse (physical/emotional/sexual)
- Developmental years
- Institutionalization
- Trauma history
- Significant relationships
- Significant losses
- Counseling (past and present)
- Coping skills
- Current precipitants

Social Aspects

- Housing
- Entitlements
- Social activities
- Feeling safe
- Work/school environment
- Hobbies/Interests
- Spirituality
- Community resources

Quality of Life Indicators

- Living situation
- Physical health
- Subjective sense of well-being
- Vocational functioning
- Relationships
- Symptom frequency

Interviewing Techniques

- Questions wording can make a significant difference in the information collection process
- Building rapport with an individual and showing respect are the most important issues
- Taking developmental stage into account is very useful

Basic Interview Cautions

- Avoid/Caution with these question types:
  - **Yes-No**
    - "Do you use drugs?"
  - **Double-barreled**
    - "Do you like your home and your staff there?"
  - **Long, multiple**
    - "Do you like your job or don't you, and what do you think about your supervisor and co-workers?"
  - **Leading**
    - "You knew that you weren't supposed to do that, didn't you?"

Interview Techniques

- What works well?

- Recapping
- Summarizing
- Concretizing

Interview Techniques and Considerations

- Myth – “I can’t get good information from a person with ID”
- Why?
  - Difficulty communicating what happened
  - Remembering the order of events
  - Difficulty naming people, places, and times
  - Providing consistent responses
- Truth – Everyone may have difficulty with the above issues
  - Do not avoid interviewing a patient because they have difficulty with 1 or more

Interview Techniques /Considerations

- Language
  - Sixth grade level
  - Match questions/answers with individuals level (ex. 2 or 3 word sentences)
  - Avoid double negatives
  - Use words victim uses for body parts

- Abstract Concepts
  - Avoid “Why,” “How” and “If” questions
  - When possible, “concretize the abstract”

Interview Techniques and Considerations

- Sub-vocalizations
  - reflects a strategy to vocalize the thought processes in the individual's mind ("hearing)" what they are thinking
  - rehearse what is going to be said or to practice something the individual is planning to do
  - These should not be considered stalling tactics or an attempt to lie
  - Not the same as "talking" from person with a psychiatric disturbance (hallucination)

Interview Techniques and Considerations

- Saliency - “emotional strength or pull” of an experience or information—something that puts the individual on alert and has high personal relevance
- The saliency of information helps all people remember things – good or bad
- The saliency of common events may be greater for individuals with ID (i.e. Fun activities)
- If you know what is salient for the patient, you can link that information to the event/behavior of interest (i.e. Food)

Fragile X Communication Patterns

- Indirect style of verbal expression
- Eye contact/Sitting at an angle
- “Cluttering”
  - How do you feel about going for a ride?
  - Cars run on gas, you need oil, too

Fragile X Communication Patterns

- Avoidance of eye contact
- Echolalia
- Staccato speech
- Unusual response to sensory stimuli
- Fragile X handshake
- Mental Status Examination
- Perseveration (Automatic Phrases)

Down Syndrome

- Early intervention vital (ability to acquire new information slows through developmental years)
- Especially have difficulty with “wh-” questions, irregular past tense questions, embedded sentences
- Impaired pronunciation
- Hearing and oral structures

Medical Problems

- 85% have untreated, under-treated or undiagnosed problems
- worsened by restrictions on care (labs, office visit frequency and length)
- medications used in ways they were never intended, in unsafe ways, with abbreviated monitoring protocols

Seizures

- Inadequately treated or undiagnosed
- Presentation variable
- Must be ruled in or out (medications have multiple target symptoms)

Pain (Chronic)

- Chronic pain of various types
- Individual often unable to communicate
- Most common presentation for psychiatric evaluation is violence of some sort

Autoimmune Disorders

- Especially thyroid and arthritis
- Screening labs: other deficiencies should be ruled out

Reflux (GERD)

- Undiagnosed may lead to GI cancers
- Caution with use of H2 blockers
- Caution: these medications prescribed inappropriately at times

Sleep Apnea

- Respiratory problems common
- Typical body habitus not required
- Treatable

EPS

- Extra-pyramidal side effects
- Some literature shows increased incidence of EPS
- Antipsychotic medications overused in this population
- Multiple antipsychotics can mask some EPS symptoms

Clinical Vignettes

Five Stories

Gina

- 45 year old female
- Jaw clenching
- Poor appetite
- Treated by Internal Medicine doctor for 2 years
- Laboratory studies ordered

Commonly missed medical conditions

- ***Seizure disorders***
- ***Pain (chronic)***
- ***Autoimmune disorders***
- ***Reflux (GERD) and other GI***
- ***Sleep apnea***
- ***Extrapyramidal Side Effects***
- ***Vitamin Deficiencies***
- ***Allergies***
- ***Chronic constipation***

Communication Deficits

- Observation
- Relatedness
- Expression of Affect
- Impulse Control
- Attention Span
- Activity Level
- Unusual or Repetitive Behavior

The Sisters

- Cecelia and Sherry
- Severe ID and Moderate ID
- Diagnosis: Schizophrenia (both)
- Haldol 30 mg daily (each)
- Significant tardive dyskinesia
- ‘Nonverbal’ and Hypomanic
- Client Profile

Managing Medications

- If you adding a medication, consider discontinuing one as well
- If patient is doing well, review meds carefully at every appt and “clean up” the regimen
- Prescribe QD if possible, then BID, then TID, etc.
- Use generics if available
- Always review mechanisms of action, receptor systems, etc

General principles–Antidepressants

- Probably under-utilized
- Bupropion (Wellbutrin, Zyban): caution in this specialized population which has high prevalence of seizure disorders
- Poly-pharmacy common
- Receptor systems/side effect profiles
- Compliance, half-lives

Teresa

- History of Mild ID and Major Depressive Disorder, recurrent, severe with psychotic features
- Stable for months
- Recent loss of brother
- Psychotherapy (counseling) and/or medication changes?

Life Expectancy

- 1920s
- 1990s
- Today

Grief and Loss Issues:

Attempt to characterize developmental level and concept of loss/death at that stage

Developmental Implications of Loss and Grief/ Piaget

- Sensorimotor stage
  - Profound MR; developmental age 0-2 years
  - Experience of loss may be one of an expectation that lost object will return
  - Constantly unfulfilled expectation

Developmental Implications of Loss and Grief/ Piaget

- Pre-operational Stage:
  - Developmental age 2-7 years
  - Severe/Moderate MR
  - How will the loss affect me? Who will understand me now? Who will take care of me? Who will be my friend? Who will give me things?
  - Fantasy and magical thinking may be used

Developmental Implications of Loss and Grief/ Piaget

- Concrete operations
  - Developmental age 7-11 years
  - Moderate/Mild MR
  - Can understand clear and specific explanations of loss and death
  - Tend to take things literally

Psychotherapy/Counseling

- Referred by others
- Frequency and length of appointments
- Mobile work
- Involving family/staff/etc.
- Focus: Therapeutic alliance
- “Stay in the chair”

Psychotherapy

- This specialized population has a high incidence of trauma as well as complicated grief/loss issues

- Chris:
- Loss of parents, betrayal by brother, and move to GH
- Subtitles added/No medications
- Journaling/Janga/50 minute session

Antipsychotic Medications

- ***First Generation versus Second Generation***
- ***First Generation are "tried and true"***
- ***First Generation have multiple forms of delivery***

Antipsychotic Medications

- ***Older medications are inexpensive (several are $4/month supply)***
- ***Antagonism of DA receptors (especially DA-2)***

Antipsychotic Medications

- *Standard to prescribe a medication to prevent EPS (extrapyramidal side effects)*
- *May be considered temporary*
- *Cogentin*
- *Artane*
- *Benadryl*
- *Benzodiazepines (in emergency situations)*
- *Take into consideration half life*

First Generation Antipsychotics

Chlorpromazine	Thorazine		1954
Trifluoperazine	Stelazine		1958
Perphenazine	Trilafon		1958
Thioridazine	Mellaril	1959	
Fluphenazine	Prolixin		1959
Thiothixene	Navane	1967	
Haloperidol	Haldol	1967	
Mesoridazine	Serentil		1970
Loxapine	Loxitane		1973

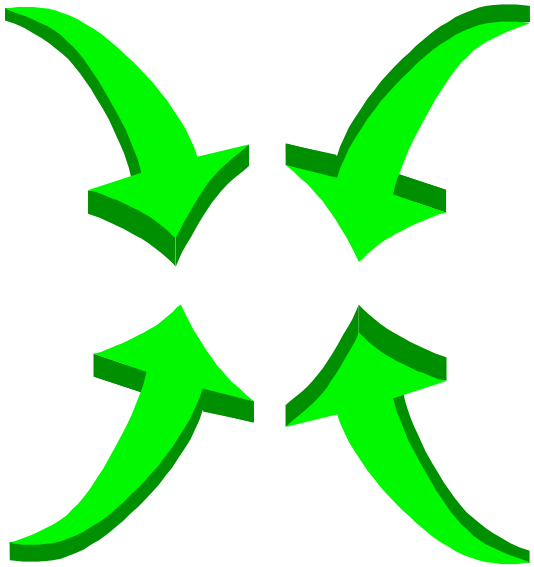
First Generation Antipsychotics

- *All lower seizure threshold*
- *All decrease cardiac contractility*
- *All cause orthostatic hypotension (dizziness upon standing)*
- *All cause elevated prolactin*
- *All cause anticholinergic side effects*

First Generation Antipsychotics

Haldol	2mg
Prolixin	2mg
Orap	1.5mg
Navane	4mg
Stelazine	5mg
Trilafon	8mg
Moban	10mg
Loxitane	10mg
Thorazine	100mg
Mellaril	100mg

Potent/EPS



Antichol/Sedation

Second Generation Antipsychotics

- Clozapine (Clozaril) Novartis 1989
- Risperidone (Risperdal) Janssen 1996
- Olanzapine (Zyprexa) Lilly 1996
- Quetiapine (Seroquel) AstraZeneca 1997
- Ziprasidone (Geodon) Pfizer 2001
- Aripiprazole (Abilify) Bristol-Myers Squibb 2003
- Paliperidone (Invega) Janssen 2007

Mechanism

- Postsynaptic DA Block: D-1 and D-2
- Typicals (First Generation):
  - Mesolimbic DA block: reduces positive symptoms
  - Nigrostriatal DA block: EPS
- Atypicals: (Second Generation) also block 5HT > DA
  - Mesolimbic DA block: reduces positive symptoms
  - Less nigrostriatal block: less EPS
  - Also effective on mesocortical: negative symptoms

Extrapyramidal Side Effects

- *Acute EPS present in 50-90% of patients receiving typical antipsychotics*
  - *akathisia*
  - *dystonia*
  - *parkinsonism*
- *Chronic EPS present in 15-20% of patients receiving typical antipsychotics*
  - *tardive dyskinesia*

Dystonias

- *Involuntary muscle contraction, many variations*
  oculogyric crisis/torticollis/laryngospasm
- *Usually occurs within days*
- *Rare in elderly, esp. high risk in young AA males*
- *Leads to noncompliance, watch half-lives*
- *Treatment: cogentin, benadryl, benzo IM/IV*

Akathisia

- *Internal restlessness, subjective muscle discomfort (usually trunk/legs)*
- *Pacing, sit/stand, dysphoric*
- *If untreated leads to poorer outcome and higher risk of TD*
- *Treatment: beta blockers, lower dose or change medications, benzodiazepines or anticholinergics, space intervals*

Parkinsonism

- *Resting tremor, cogwheel rigidity, bradykinesia, masked facies, shuffling gait*
- *Especially elderly women, early in tx*
- ***Bilateral/symmetrical***
- *Mental clouding/ Secondary dysphoria*
- *Treatment: decrease or d/c med; cogentin/benadryl;* ***NO dopamine replacement***

Tardive Dyskinesia

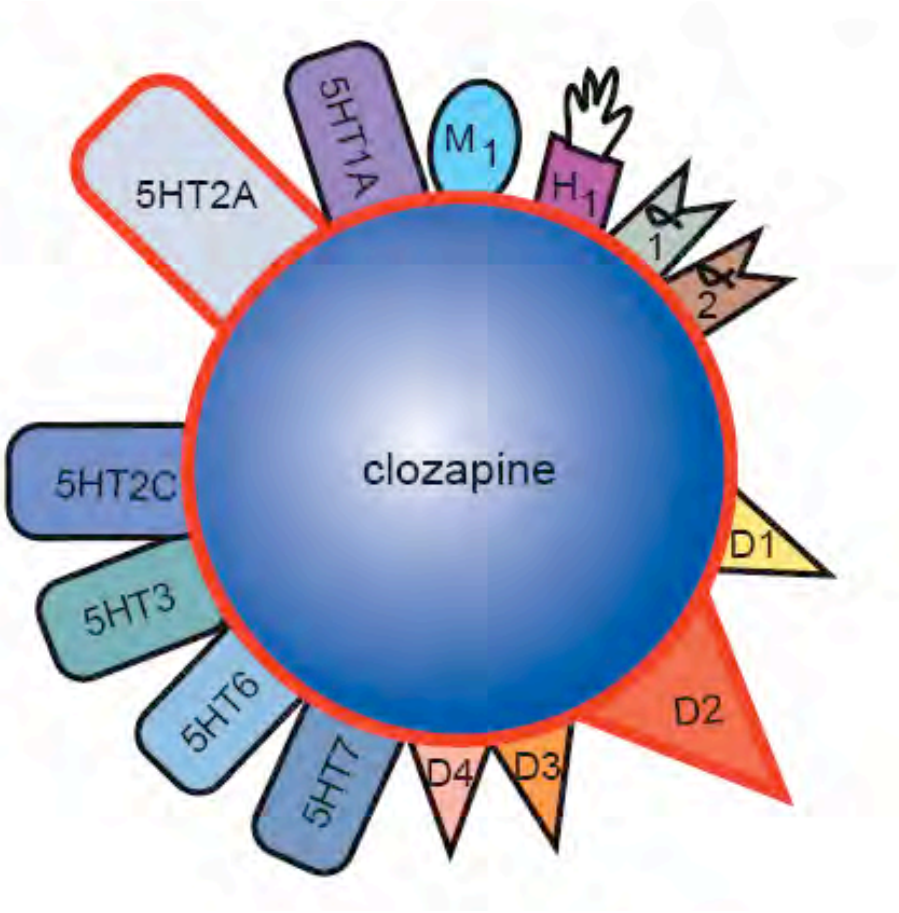
- *Abnormal involuntary irregular choreoathetoid movements of head/limbs/trunk*
- *Perioral most common tongue/jaw/lips/facial/hands*
- *Usually irreversible*

Tardive Dyskinesia

- *Especially elderly, esp. females*
- *>= 6 months into treatment*
- *Treatment: Decrease DA activity, change med, lower dose, no anticholinergic, vitamin E, consider clozaril/olanzapine*

Important receptor systems

- *Dopamine (positive symptoms)*
- *Histamine (sedation, weight changes)*
- *Serotonin (depression; anxiety)*
- *Norepinephrine (depression; anxiety)*



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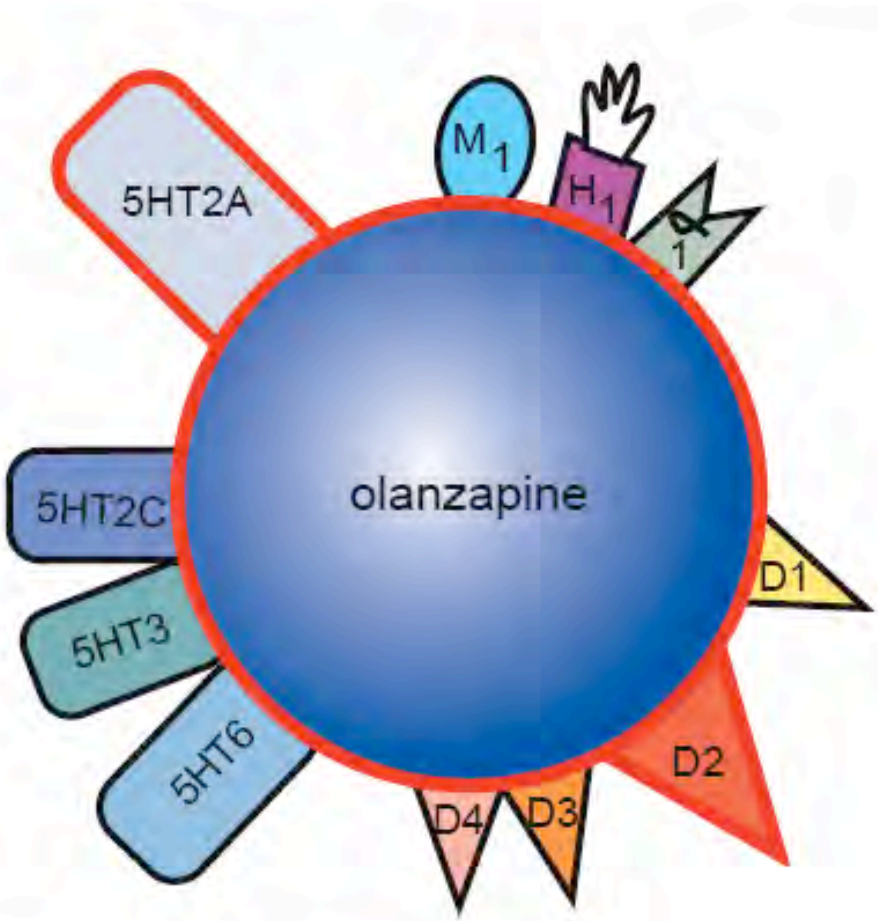

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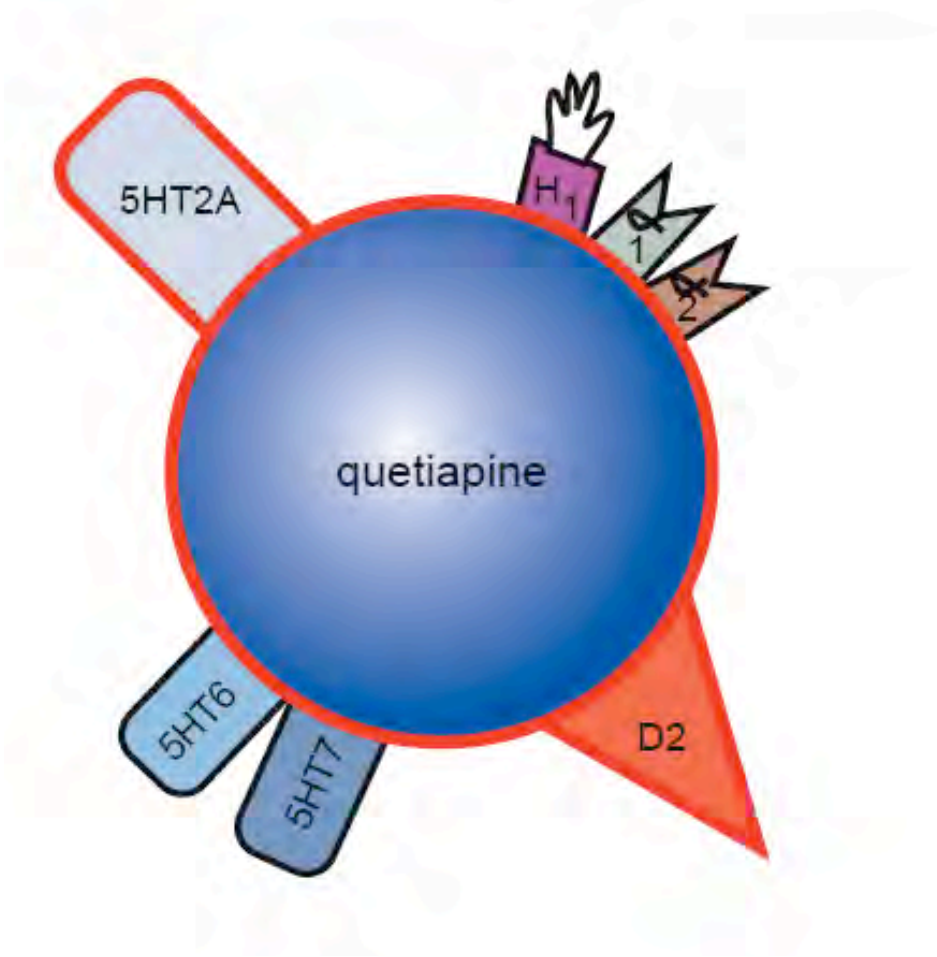

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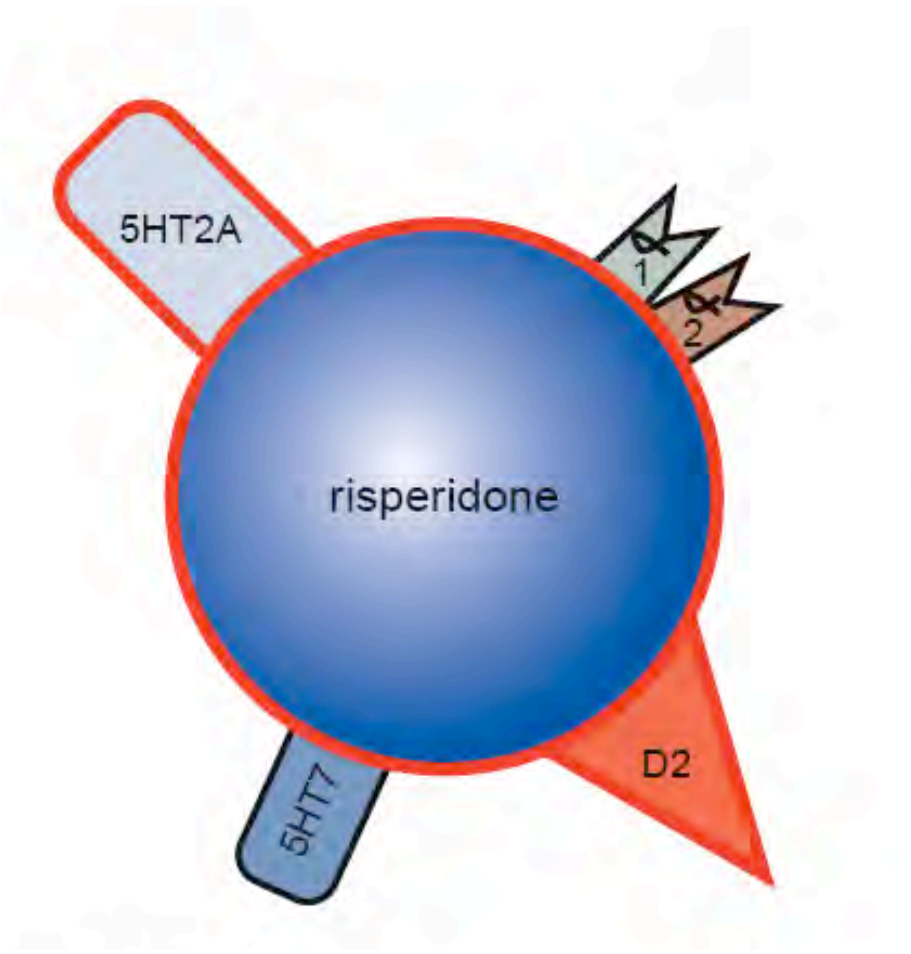

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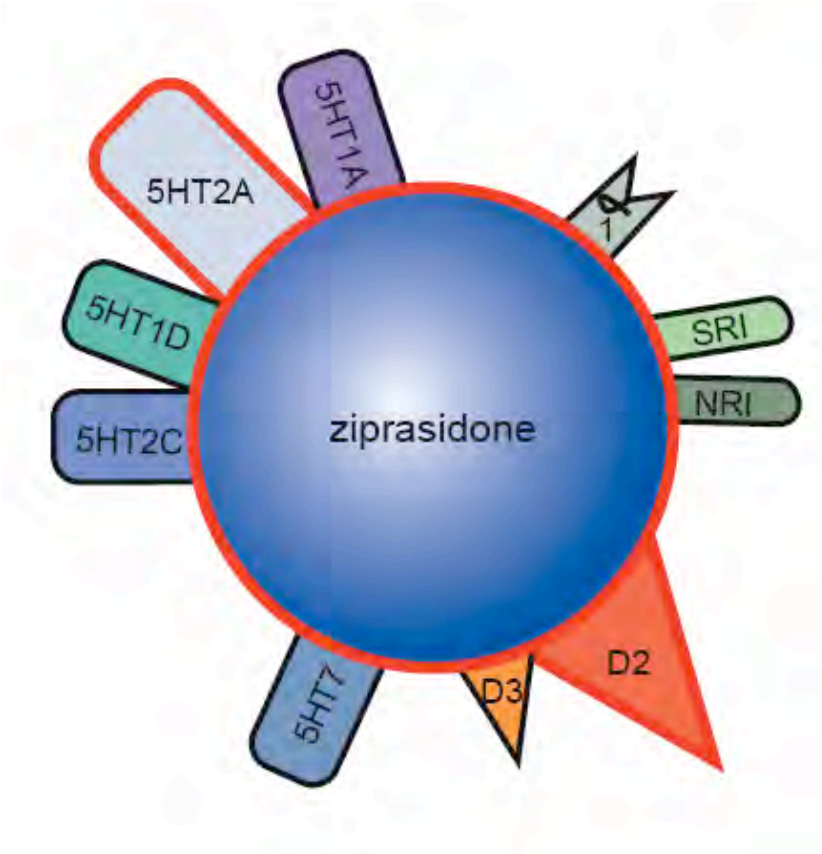

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Jesse

- 23 year old male
- History of Severe ID, Depression NOS
- Presentation: aggression
- Physical and emotional abuse during childhood
- History of GI pathology

Jesse

- **Medication list:**
- Zyprexa
- Haldol
- Trazodone
- Lexapro

Jesse

- **Medical records reviewed:**
- Medication history
- Consider mood cycling
- GI not addressed
- Consider other medical conditions
- Baseline?

Jesse: Practice Points

- Collecting data across environments
- Medication management
- Physical health

Collecting data

- Behavior support specialists
- Direct Care staff
- Team meetings
- Observation in habilitation environment
- Involving guardian/family/all interested parties

Anxiety Disorders

- More common in this specialized population

- Fragile self esteem
- Fear of failing
- Loss of caregivers
- High prevalence of abuse

Medication Orders

- Benzodiazepines
- Using antidepressants if mood cycling present
- One change at a time
- Timing (AM/noon/3PM/HS)
- Be resourceful and creative
- Study receptor systems
- Individuality

Baseline

- Identify highest functioning time period
- Identify medication regimen, environmental factors, support system, quality of life factors
- Study past psychiatric treatment, hospitalizations

Physical Health

- Multidisciplinary team vs. Interdisciplinary team
- Refer to appropriate clinicians (those who are comfortable with and thorough in the treatment of patients with disabilities

Hyperthyroidism

- Excessive thyroid hormone production, causing an increased speed of all the body's organs and intestines
- Weight loss, increased appetite, **anxiety, fatigue, depression, hyperactivity, irritability**
- Diagnosis: Decreased TSH in bloodwork
- Treatment: Medication, Surgery, or Radioiodine

Hypothyroidism

- Insufficient production of thyroid hormone by the thyroid gland
- Symptoms: **fatigue,** cold intolerance, **impaired memory, anxiety, depression, panic attacks, irritability, acute psychosis, mood instability**
- Diagnosis: Elevated TSH in bloodwork
- Treatment: Synthetic thyroid hormone (i.e. Synthroid)

Arthritis

- **Lab work**: Elevated ESR (indicates inflammation); refer to Family Practice Doc

- **Rheumatoid arthritis**: autoimmune disorder which causes the immune system to attack joints; painful condition which can lead to joint destruction and decreased mobility
- **Osteoarthritis**: low grade joint inflammation caused by abnormal wearing of cartilage; may lead to decreased joint fluid and atrophy of muscles

Some Practical Suggestions

Environmental Modifications

- **EMPLOY:**
- Calm, soothing tone of voice
- Positive and friendly attitude of helpfulness
- Expressing concern for patient's well being
- Offering food or drink
- Allowing phone call to trusted support person
- Decreasing waiting times
- Distraction with a more positive activity
- Removal of potentially dangerous items from area
- Verbal redirection and self-limiting

Environmental Modifications

- **AVOID:**
- Overcrowding patients
- Loud and irritating noises
- Intimidating direct eye contact
- Unnecessary invasion of personal space
- Direct confrontational stance
- Hands concealed in pockets

Treatment: Medications

- Most literature supports use of second generation antipsychotics; most agree these are the treatment of choice
- Clozapine (Clozaril)
- Risperidone (Risperdal)
- Olanzapine (Zyprexa)
- Quetiapine (Seroquel)
- Lithium (mood stabilizer; research to support)

BPS Formulation

- The relationship among behavior, environment and neurochemistry is flexible, constantly evolving, and specific to the individual.

Summary

- View each patient as the complex, dynamic individual that they are;
- Goal: Integrate the information of the BPS and formulate a diagnosis and treatment recommendations

- **Remember, this is a dynamic process; the only constant is that the formulation will change**

Signs the diagnosis is incorrect

- Using more than one medication in the same class
- Residual signs/symptoms
- Use of toxic dosages or presence of side effects

Medications

- Medications prescribed should improve cognitive function (or at least not cause decline)
- Should treat conditions fully
- Should be similar to medications offered to anyone else with the same disorder

Individuality

- At their best, pharmacologic , psychological, and behavioral treatments lead to improvements in quality of life for individuals.

- With that ultimate goal in mind, efficacy of a treatment in terms of **symptom reduction** or **behavior change** is insufficient to demonstrate suitability.

Thanks for your time/attention

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