# SEXUAL BEHAVIORS IN DEMENTIA

CAROLINA JIMENEZ-MADIEDO, MD

GERIATRIC PSYCHIATRIST

RHODE ISLAND HOSPITAL/THE MIRIAM HOSPITAL

# SEXUAL BEHAVIOR IN THE ELDERLY

Many elderly maintain interest in sexuality

50-80% people over 60 years are sexually active ≥ 1 time/month

Per Federal regulations, the long-term resident has a right to sexual expression

doctormurray.com

# BARRIERS THAT PREVENT SEXUAL EXPRESSION

Lack of Privacy

Lack of a willing and able partner

Mental illness

Physical limitations

Attitudes of staff

Adverse effects of medications

Feeling unattractive

Erectile dysfunction

Dyspareunia

# SEXUAL ABUSE IN THE NURSING HOME

Resident-to-resident 78%

Staff-to-resident 43%

Sexualized kissing and fondling

Unwelcome sexual interest

Sex-offenders in long-term care facilities 0.05-3%

Center for Medicare and Medicaid Services does not require a facility to research every new resident's criminal history unless there is reason to believe that the resident had one.

Under 42 CFR 483 SNF is required to protect the resident's right to be free from sexual, physical and mental abuse

# CLINICAL CASE

CC: “I love you”

HPI: Mr. XXX is an 83 year-old widowed male, with history of Major Neurocognitive Disorder, probable Alzheimer’s type, transferred from nursing home for inappropriate sexual behavior. He humps on the chair, touches and grabs staff, blinks, smirks, and moves his tongue. The behaviors started ~2 years ago and have caused eviction from 6 facilities. He has had depressive symptoms in the past. He has been on multiple medication trials including paroxetine, depakote, risperidone and depo-provera.

ROS: negative

PPH: 3 prior hospitalizations for inappropriate sexual behavior. Geriatric Psychiatry follow-up at Nursing home.

PMH: Aortic stenosis, CAD, HTN.

Allergies: NKDA

SH: Originally from Portugal, moved to the US in his 30s. Elementary education, but reports being illiterate. Always flirtatious but took care of his wife. Daughter has POA.

MSE:

Appears stated age, chair bound, well groomed, cooperative and seductive

Prolonged speech latency and decreased productivity

Mood is “very good” and affect is hyperthymic, expansive and inappropriate to situation

Thought blocking

No AH/VH/SI/HI

Poor insight and judgment

MMSE: 9/30. Days forward 7/7 backwards 0/7. Registration 3/3, recent memory 1/3 with cues. Orientation 1/10. Unable to read, write, spell, count 7 backwards.

Labs/Tests:

- Ammonia 65 → 34.
- UA contaminated, UC E. coli, follow-up UA negative.
- TSH, RPR, B12, folate , lipid panel, BMP WNL.
- CBC platelets 117 →98 →74 →107

  Prolactin 22 mildly elevated with haldol

  Testosterone 166 and free testosterone 23.9 NL

  VPA 20 → 97

# INAPPROPRIATE SEXUAL BEHAVIORS

Szasz, 1983

1. Sex talk: Using foul language that is not keeping with a patient's premorbid personality
2. Sexual Acts: Touching, grabbing, exposing or masturbating
3. Implied sexual acts: Reading pornographic material or requesting unnecessary genital care.

Medeiros, 2008

1. Intimacy seeking: Normal behaviors that are misplaced in social context (kissing, hugging)
2. Disinhibited: Rude and inappropriate behaviors that would be considered inappropriate in most contexts (lewdness, fondling, exhibitionism)

# EPIDEMIOLOGY OF INAPPROPRIATE SEXUAL BEHAVIORS

1.8-25% depending on the setting (hospital > community).

More severe in SNF

Behavioral treatment is more frequent in the community (81%) than in SNF (45%).

Present from mild cognitive impairment to severe dementia.

Male > female.

More common in vascular dementia.

Alzheimer's disease at home:

- 14% high sexual activity
- 8% embarrassing sexual behaviors
- 6% increased interest in the same gender
- Decreased sense of decency in 29% males and 23% females

# ETIOLOGY

CNS injury, stroke, tumor

Fronto-temporal dementias: disinhibition

Temporal lobe dysfunction:

- Kluver-Bucy Syndrome
- Kleine-Levin
- Temporal Lobe Epilepsy

Medial striatal region: Huntington's Dementia

Trauma to limbic system: changes in sexual preference

Multiple Sclerosis

Primary psychiatric disorders

Delirium: any etiology, ETOH, anticholinergic, benzodiazepines

Medications: Levodopa, stimulants

Psychological: Forgetfulness, boredom, anxiety, loneliness

Social: Lack of privacy, restrictive attitudes, social cues

Hospital Course:

-The patient was started on Finasteride

-Paroxetine was discontinued

-Initial hyperammonemia was corrected and Depakote was increased

-The staff gave gloves to the patient without success

-Haldol was started and titrated to 2 mg TID

The patient continued presenting grabbing and touching staff inappropriately (mostly at bathing) and touching himself.

The patient was tearful at times and spitting medications

-Medroxyprogesterone was started

-Team had regular conversations with daughter

# ETHICAL CONSIDERATIONS

Liberty

Questionable intent to cause harm

Justice: Balance rights of patient and community at large

Informed consent by surrogate

Legal rules: Illegal in 41 states

No legal proceedings to limit liberty (incarceration), privacy (registration as sex offender), equality (no location prohibition) and association (No restraining order).

# SPECIAL CONSIDERATIONS IN DEMENTIA

Assess:

Does the resident has the ability to perform acts voluntarily?

Does the resident understands the consequences?

Are the choices consistent with pre-demented behaviors and values?

They may have capacity to consent to specific sexual acts but not others or with specific partners but not with others.

Confusion during sexual activity can make consent uncertain.

7% of caregivers have reported sexual aggression from patient

# NON-PHARMACOLOGICAL INTERVENTIONS

Redirect the behavior either verbally or physically

Tell the resident that the behavior is inappropriate

Isolate the resident from other residents

Provide a staff member of the opposite sex

Select clothing that opens in the back

Ignore unwanted behaviors and encourage appropriate behaviors

Provide a substitute object (Pink Panther Case) (Tune and Rosenbery, 2008).

Psychosocial intervention (Individualized plan, circumstances, risk assessment by sp
medication in a case-control study (Bird, 2002).

www.pinkpanther-wine.com

# PHARMACOLOGIC INTERVENTIONS

Case reports & case series.

Individuals were mostly males, ages 40-92, MMSE 0-18.

Anti-androgens

Antidepressants

Antipsychotics

Anticholinesterases

Beta-blockers

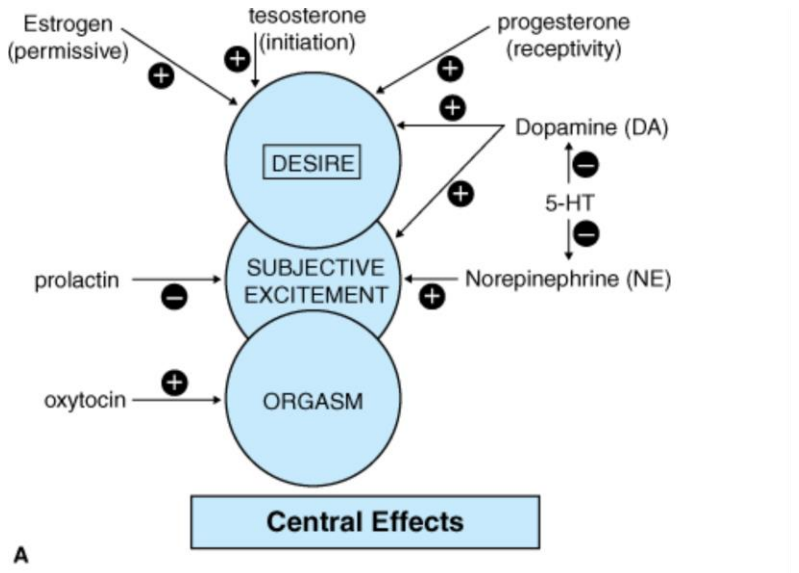
Others

# CENTRAL EFFECTS ON SEXUAL FUNCTION

**From: Part II. Principles of Geriatrics**
**Hazzard's Geriatric Medicine and Gerontology, 6e, 2009**

Changes in Increased Libido:

- Epinephrine and norepinephrine
- Dopamine
- Androgens
- Low serotonin



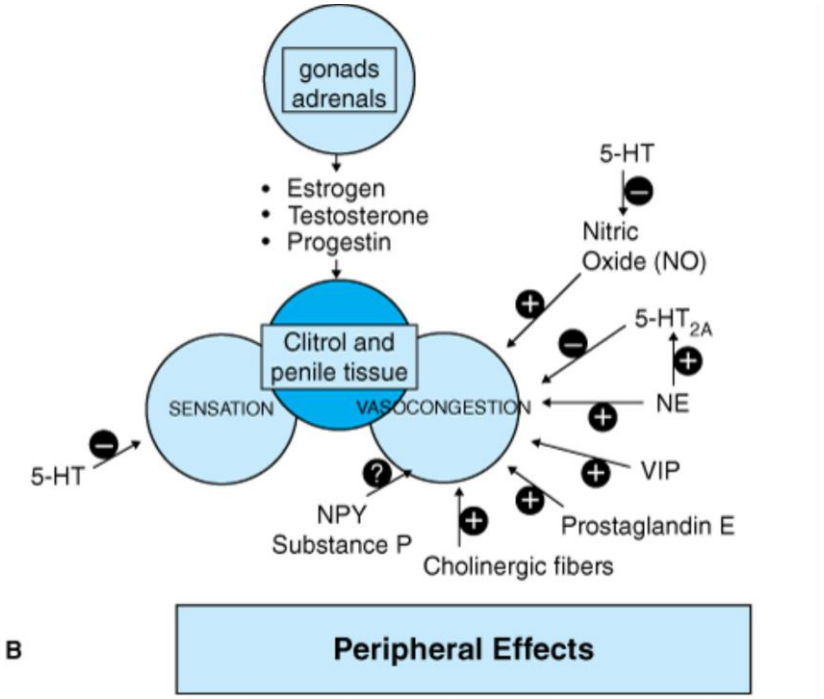



**Legend:**

Central and peripheral effects on sexual function. + indicates a positive effect. – indicates a negative effect. VIP, vasoactive intestinal polypeptide; 5-HT, serotonin (5-hydroxytryptamine); NPY, neuropeptide Y; NE, norepinephrine. (Clayton AH. Sexual function and dysfunction in women. Psychiatr Clin North Am. 26(3):673–82, 2003.)

# PERIPHERAL EFFECTS ON SEXUAL FUNCTION

**From: Part II. Principles of Geriatrics**
**Hazzard's Geriatric Medicine and Gerontology, 6e, 2009**



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# ANTIDEPRESSANTS

**Paroxetine:**

- ETOH dementia, masturbation
- 20 mg/day

**Citalopram:**

- 2 cases AD making multiple demands and OCD behaviors
- 40 mg/day

**Trazodone:**

- Helpful in a case of Dementia NOS
- 100mg 4xday

**Clomipramine:**

- 73 y/o non-demented male with OCD, narcolepsy and fetishism improved with 150 mg/day but developed anticholinergic delirium.
- OCD type of behaviors

# ANTIPSYCHOTICS

**Haloperidol:**

- Male with AD inserting objects in urethra.

**Zuclopenthixol:**

- Dementia NOS making sexual suggestions.

**Olanzapine:**

- AD repeated sex and touching wife inappropriately in public.

**Quetiapine:**

- Female with Lewy body and male with stroke, parkinsonism, hypotension.

# ANTICHOLINESTERASES

**Rivastigmine:**

- Helped sexual and aggressive behaviors in a male with AD.
- 3 mg/day

**Donepezil:**

- Caused compulsive sexual thoughts in 2 females.

# ANTICONVULSANTS

**Carbamazepine:**

- Male with AD masturbating and making frequent demands.
- 200 mg/day

**Gabapentin:**

- Helpful in 5 cases
- 900-2700 mg/day

**No case reports for Valproic acid or pregabalin.**

# BETA-BLOCKERS AND OTHERS

**Pindolol:**

- Male with AD exposing and touching himself.
- 20 mg/day

**Buspirone:**

- VD and sexual disinhibition.
- 5 mg TID

# ANTI-ANDROGENS

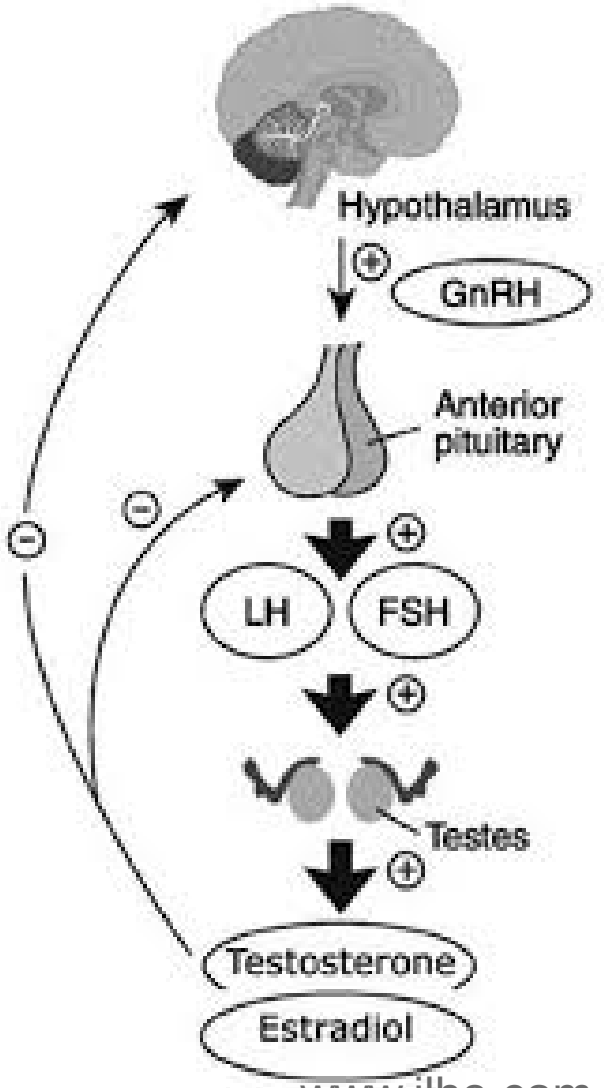
Cyproterone Acetate

Medroxyprogesterone Acetate

Leuprolide

Estrogens

Non-hormonal anti-androgens



# MEDROXYPROGESTERONE ACETATE

Progestogenic > antiandrogenic

17 cases, Male, Ages 58-86, MMSE 9-24, 50 AD, Vascular, Mixed and unspecified dementia.

Inhibits gonadotropin, stimulates testosterone until ablation.

IM: 200 mg biweekly to 500mg weekly

Effect after 1-2 weeks

Inhibits P450 2C9

Monitoring: weight, ?PTTa, D-dimer, target testosterone concentration <100ng%

Helpful in case of verbally aggressive 80 y/o male with AD

Side Effects:

- Reduced bone density
- 18% weight gain
- 9% headache
- 5% malaise
- < 1% thromboembolism
- <1% muscle cramps, dyspepsia, gallstones & diabetes mellitus

# CYPROTERONE ACETATE

Progestagen

Feminization of male rat fetuses.

Competes with testosterone at target-organ receptor.

Blocks testosterone (& estrogen) synthesis in gonads.

Blocks compensatory gonadotropin rise, progestational activity.

2 cases: PD + bipolar and VD + TBI.

PO: 50-200 mg/day Max. 600 mg/day.

IM: 200-300 mg weekly/biweekly.

In USA it is mixed with ethinyl estradiol and only at 2 mg dose.

Side effects:

- Pain at the injection site, joint & muscles,  headache, nausea, sleep disturbances
  Feminization, ~20% gynecomastia
  Thromboembolism
  Depression, psychosis
  0.5% adrenal insufficiency or hyperplasia
  <1% hepatotoxicity

# LHRH AGONISTS

Leuprolide

Chemical castration

Causes hypoandrogenism.

43 y/o male with FTD and  Kluver-Bucy syndrome.

IM: 3.75 – 7.5 mg monthly

SC: 3.75 mg monthly

Side effects:

- Hypogonadism
- Erectile dysfunction

  16-35% burning on injection site

  2-13% Weight gain

  2-7% gynecomastia

# ESTROGENS

**Diethylstilbestrol 2 mg/day**

- 15 patients **case series**
- MMSE 4.92
- Decreased aggressive behavior (P <0.02).
- Useful in a case of gender dysphoric cross-dressing after discontinuation of MPA.
- Useful in a case of 92 y/o male with AD and prostate cancer.

**Conjugated equine estrogens 0.625 – 1.25 mg/day.**

  - VD with sexual aggression and comments.

- Ethinyl estradiol 0.05 – 0.10 mg/day.
  - Mixed with cyproterone, oral and transdermal.
  - No studies.
- Estrogens were effective in 38/39 male, only 17 had dementia (Lothstein, 1997).

# NON-HORMONAL ANTI-ANDROGENS

Case study of 20 patients with dementia

Patients were started on cimetidine and titrated until behavior was manageable by caregiver or the patient had a side effect.

Then, Ketoconazole or Spironolactone were added.

Cimetidine: 600 – 1000 mg/day

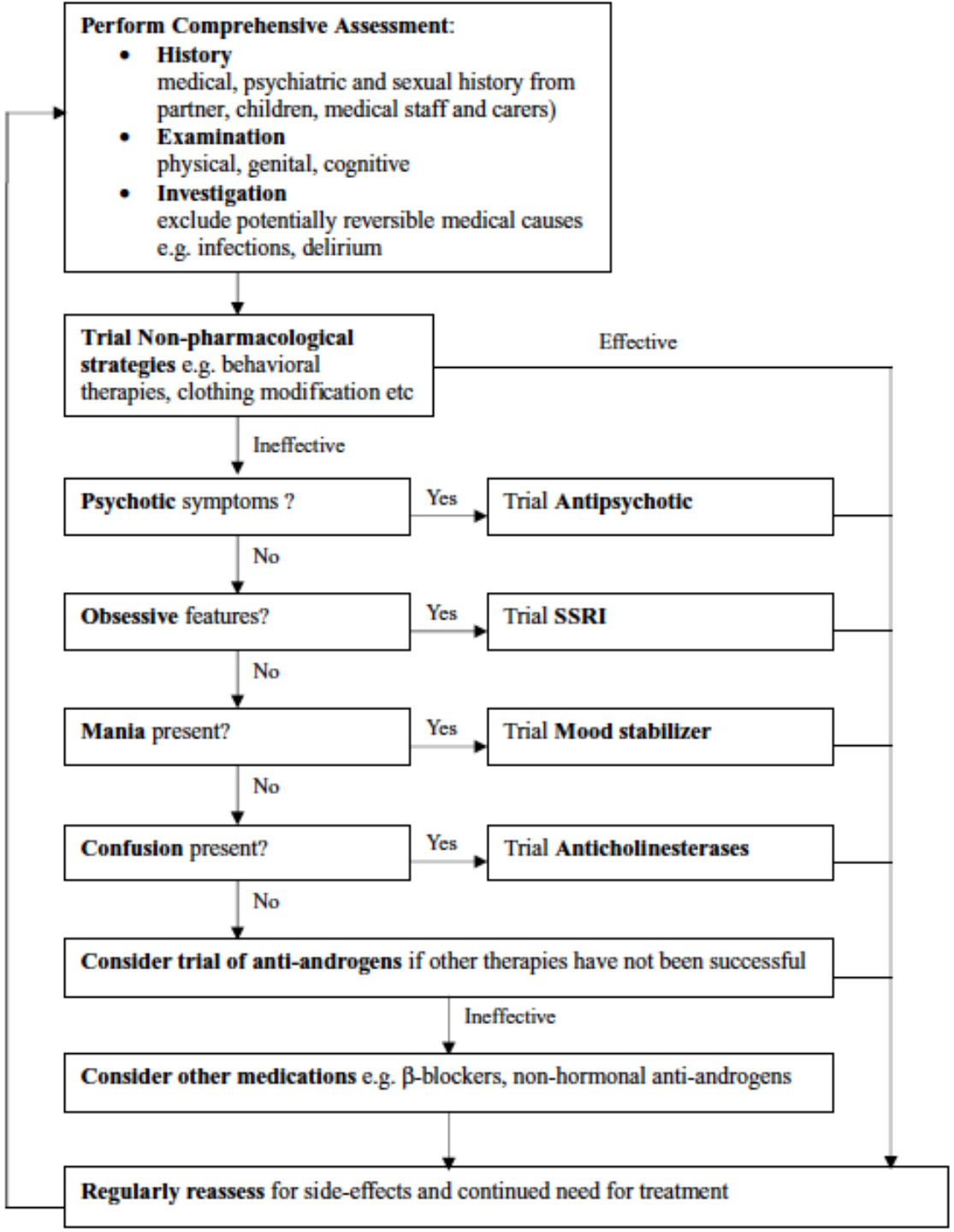
- 14/20 patients responded in 1-8 weeks to cimetidine alone.
- 6/20 patients responded to cimetidine + second agent.

Ketoconazol: 100-200 mg/day

Spironolactone: 75 mg/day

# SUGGESTED APPROACH TO MANAGING INAPPROPRIATE SEXUAL BEHAVIOR IN DEMENTIA

I. Tucker, 2010



# RECOMMENDATIONS

If PO available:

1st line:

A. SSRI
B. Tricyclic

2nd line:

A. Cyproterone
B. Medroxyprogesterone

3rd line:

A. Leuprolide
B. Estrogens

If PO is not available:

1st line:

A. Medroxyproprogesterone IM
B. Cyproterone IM

2ND line: estrogen transdermal patch

3rd line: LHRH agonists

R. Guay, 2008

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# THANKS

www.rightspeak.net