Rabbit Syndrome:
A Rare and Often Unrecognized Medication Induced Oral Dyskinesia

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Commonly Recognized Medication Induced Movement Disorders

- Pseudoparkinsonism
- Dyskinesia
- Dystonia
- Akathisia
- Neuroleptic Malignant Malignant Syndrome
Less Common and Often Undiagnosed or Unrecognized

- Rabbit Syndrome
What is Rabbit Syndrome?
Literature Review

- Electronic Search of CINAHL, PubMed, PsychInfo from 1972 to 2009 using key term “Rabbit Syndrome”
- Limited number of articles
- Mostly case studies in pharmacology and medical journals
- No articles located in nursing journals
Background

In 1972 Villeneuve first described Rabbit Syndrome

“…About two years ago a female patient was seen, showing perioral muscular movements strikingly imitating the rapid, chewing-like movements of a rabbit’s mouth. This clinical picture was immediately labeled the ‘rabbit syndrome’.”
Clinical Symptoms

- Involuntary movement disorder
- Characterized by rapid movement of the lips
- Imitates the chewing movement of a rabbit
- Oral movements occur in quick up and down, predictable patterns
- Often combined with popping sound caused by lips smacking together
Onset

- Typically appears after long-term treatment with antipsychotic medications
- Rare instances reported of acute onset in patients with no psychiatric history and no exposure to antipsychotic medications
- Symptoms appear a few days following initiation or after alteration in dosing of antipsychotic medications
- A few reported cases associated with other types of medications
Reported Prevalence

“1.5% to 4.4%”

Only two known published prevalence studies

   - inpatient psychiatric unit
   - sample: 266 patients receiving antipsychotic medications
   - 4.5% incidence in patients receiving antipsychotics (without anticholinergic)
   - 2.3% incidence in patients receiving both antipsychotics plus anticholinergic
Prevalence (continued)

2. Chiu, Lam, Chung, Wing, & Shum (1993)
- 1190 patients at 3 sites in Hong Kong
- Reported 1.5% prevalence

<table>
<thead>
<tr>
<th>Total n=1190</th>
<th>Antipsychotic Alone (Cases Reported)</th>
<th>Antipsychotic plus Anticholinergic (Cases Reported)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychogeriatric Clinic (n=65)</td>
<td>n=59 (n=1)</td>
<td>n=6 (n=0)</td>
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<tr>
<td>Prevalence: 1.5%</td>
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<tr>
<td>Inpatient Psychiatric Unit (n=792)</td>
<td>n=229 (n=0)</td>
<td>n=563 (n=0)</td>
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<tr>
<td>Prevalence: 0%</td>
<td></td>
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<tr>
<td>Senior Center (n=333)</td>
<td>n=Not reported (n=0)</td>
<td>n=Not reported (n=0)</td>
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<tr>
<td>Prevalence: 0%</td>
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Etiology

- Unknown
- May be similar to cause of pseudoparkinsonism or tardive dyskinesia
Risk Factors

- Antipsychotic medications
- Age
- Gender
- Psychiatric Diagnosis
- History of brain damage
## Differential Diagnosis

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Symptoms</th>
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<tr>
<td>Tardive Dyskinesia</td>
<td>- oral movements are rotational, irregular, and slower</td>
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<tr>
<td></td>
<td>- oral movements include tongue movement along with cheeks and mouth</td>
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<tr>
<td></td>
<td>- often includes other rapid, jerky movements of torso</td>
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<tr>
<td>Pseudoparkinsonism</td>
<td>- abnormal movements include more than the mouth including bradykinesia, rigidity, and tremors of other parts of the body</td>
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<tr>
<td>Rabbit Syndrome</td>
<td>- oral movements are quick, up and down movements, predictable pattern</td>
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<td>- does not include movement of the tongue</td>
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Drugs Associated With RS

Typical Antipsychotics:
- haloperidol (Haldol®) 12 cases
- thioridazine (Mellaril®) 4 cases
- trifluoperaine (Stelazine®) 4 cases
- fluphenazine (Prolixin®) 3 cases
- levomepromazine/methotrimemedazine (Nozinan®) 3 cases
- chlorpromazine (Thorazine®) 2 cases
- perphenazine (Neuleptil®) 2 cases
- bromperidol (Bromidol®) 1 case
- clocapramine 1 case
- mesoridazine (Serentil®) 1 case
- zuclopenthixol (Cloprizol®) 1 case
Drugs Associated With RS

Atypical Antipsychotics
- risperidone (Risperdol®) 8 cases
- sulpiride (Meresa®, Bosnyl®, Dogmatil®, Eglonyl®, Modal®) 3 cases
- aripiprazole (Abilify®) 2 cases
- olanzapine (Zyprexa®) 2 cases
- clozapine (Clozaril®) 1 case
Other Drugs Associated With RS

- citalopram (Celexa®)
- imipramine (Tofranil®)
- lithium (Eskalith®)
- methylphenidate (Ritalin®)
- paroxetine (Paxil®)
Treatment

- Recommendations are anecdotal with no systematic evaluation of effectiveness
- Lower dose of antipsychotic
- Administer anticholinergic medication
- Switch from typical to atypical antipsychotic
Nursing Implications

- Monitor patients weekly for movement disorders during first 2 weeks of initial dosing with antipsychotic, then every 6 months (typical) & every 12 months (atypical)
- Monitor high risk patients more frequently
- AIMS scale
- Education to differentiate disorders
- Use lowest dose possible of antipsychotic medications
- Use atypical antipsychotic medications when possible


Discussion
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2. Complete the questions, click submit and then print your certificate.