# Pathological Lying: Symptom or Disease?

Lying With No Apparent Motive or Benefit

# by Charles C. Dike, MD, MPH, MRCPsych

athological lying (PL) is a controversial topic. There is, as yet, no consensus in the psychiatric community on its definition, although there is general agreement on its core elements. PL is characterized by a long history (maybe lifelong) of frequent and repeated lying for which no apparent psychological motive or external benefit can be discerned. While ordinary lies are goal-directed and are told to obtain external benefit or to avoid punishment, pathological lies often appear purposeless. In some cases, they might be self-incriminating or damaging, which makes the behavior even more incomprehensible.

# CHECK POINTS

- Pathological lying (PL) is noted for the chronicity and frequency of the lies and the apparent lack of benefit derived from them.
- Pathological liars believe their lies to the extent that the belief may be delusional.
- Lying behaviors that mimic PL have been described in certain personality disorders and in factitious disorder.
- Conditions that could be confused with PL include malingering, Ganser syndrome, and confabulation.

Despite its relative obscurity, PL has been recognized and written about in the psychiatric literature for more than a century. The German physician, Anton Delbruck,<sup>1</sup> is credited with being the first to describe the concept of PL. He observed that some of his patients told lies that were so abnormal and out of proportion that they deserved a special category. He subsequently described the lies as "pseudologia phantastica."

# **CASE VIGNETTE**

Mr A was desperate. He was about to lose yet another job, not because he was at risk for being fired, but because his lying behavior had finally boxed him into a corner. He had lied repeatedly to his colleagues, telling them that he had an incurable disease and was receiving palliative treatment. Initially, his coworkers treated him with sensitivity and concern, but as the weeks wore on, the scrutiny of his colleagues became increasingly pointed. He had to tell more and more outrageous lies (Please see Pathological Lying, page 68)

SEROQUEL stabilizes mood in bipolar disorder and is the only atypical proven effective in both acute mania AND bipolar depression<sup>1,2</sup>



# **Important Safety Information**

- SEROQUEL is indicated for the treatment of depressive episodes in bipolar disorder; acute manic episodes in bipolar I disorder, as either monotherapy or adjunct therapy to lithium or divalproex; and schizophrenia. Patients should be periodically reassessed to determine the need for treatment beyond the acute response
- Elderly patients with dementia-related psychosis treated with atypical antipsychotic drugs are at an increased risk (1.6 to 1.7 times) of death, compared to placebo (4.5% vs 2.6%, respectively). SEROQUEL is not approved for the treatment of patients with dementia-related psychosis (see Boxed Warning)
- Antidepressants increased the risk of suicidal thinking and behavior in children, adolescents, and young adults in short-term studies of major depressive disorder and other psychiatric disorders. Patients of all ages started on therapy should be observed closely for clinical worsening, suicidality, or unusual changes in behavior. Families and caregivers should be advised of the need for close observation and communication with the prescriber. SEROQUEL is not approved for use in patients under the age of 18 years (see Boxed Warning)

Please see additional Important Safety Information on following pages, and Brief Summary of Prescribing Information, including Boxed Warnings, at the end of this ad.



# **CLINICAL**

# Pathological Lying Continued from page 67

to cover his tracks and justify having a terminal illness. Finally, when the heat became too unbearable, he suddenly stopped going to work. On the face of it, it would seem Mr A told these lies to gain the sympathy of his colleagues, but the consequences of his lying, in terms of emotional distress and potential loss of job, far outweighed any perceived gain. Mr A had lost several other jobs in the past because of his lying, and he was becoming frustrated. Family members reported that he often told blatant lies, and even when confronted, and proved wrong, he still swore they were true. Mr A finally sought psychiatric help after concluding that he could not stop himself from lying.

This scenario, or similar stories, is not uncommon in clinical practice. Letters I have received from mental health professionals, attorneys, and individuals around the world describe similar characteristics in people they know—excessive lying, easily verifiable to be untrue, mostly unhelpful to the liar in any apparent way, and even possibly harmful to the liar, yet told repeatedly over time. Even prominent and successful individuals are not immune to this behavior—for example, the well-known California case of Judge Patrick Couwenberg, who was removed from office not only for lying in his official capacity but also for lying under oath to a commission investigating his behavior.<sup>2</sup> A psychiatric expert witness diagnosed pseudologia phantastica and suggested that the judge needed treatment. Why such a successful individual would repeatedly tell lies that could damage his credibility and put him in trouble with the law or other administrative bodies is baffling. Was his lying

# Help your patients with **bipolar disorder**

# **SEROQUEL** has

- Mood-stabilizing properties<sup>2</sup>
- Proven efficacy to treat both bipolar depression and acute mania\*<sup>1†3-7</sup>
- A target dose of 300 mg/day by Day 4 for bipolar depression with once-daily dosing at bedtime, and a target dose of 600 mg/day<sup>‡</sup> by Day 5 in bipolar mania with BID<sup>5</sup> dosing<sup>2,6</sup>

## Important Safety Information (continued)

- A potentially fatal symptom complex, sometimes referred to as Neuroleptic Malignant Syndrome (NMS), has been reported in association
  with administration of antipsychotic drugs, including SEROQUEL. Rare cases of NMS have been reported with SEROQUEL. Clinical manifestations
  of NMS are hyperpyrexia, muscle rigidity, altered mental status, and evidence of autonomic instability (irregular pulse or blood pressure,
  tachycardia, diaphoresis, and cardiac dysrhythmia). Additional signs may include elevated creatine phosphokinase, myoglobinuria
  (rhabdomyolysis), and acute renal failure. The management of NMS should include immediate discontinuation of antipsychotic drugs
- Tardive dyskinesia (TD), a potentially irreversible syndrome of involuntary dyskinetic movements, may develop in patients treated with
  antipsychotic drugs. The risk of developing TD and the likelihood that it will become irreversible are believed to increase as the duration of
  treatment and total cumulative dose of antipsychotic drugs administered to the patient increase. TD may remit, partially or completely, if
  antipsychotic treatment is withdrawn. SEROQUEL should be prescribed in a manner that is most likely to minimize the occurrence of TD
- Hyperglycemia, in some cases extreme and associated with ketoacidosis, hyperosmolar coma, or death, has been reported in patients treated
  with atypical antipsychotics, including SEROQUEL. The relationship of atypical use and glucose abnormalities is complicated by the possibility
  of increased risk of diabetes in the schizophrenic population and the increasing incidence of diabetes in the general population. However,
  epidemiological studies suggest an increased risk of treatment-emergent, hyperglycemia-related adverse events in patients treated with
  atypical antipsychotics. Patients starting treatment with atypical antipsychotics who have or are at risk for diabetes should undergo fasting
  blood glucose testing at the beginning of and periodically during treatment. Patients who develop symptoms of hyperglycemia should also
  undergo fasting blood glucose testing
- Leukopenia, neutropenia, and agranulocytosis (including fatal cases), have been reported temporally related to atypical antipsychotics, including SEROQUEL. Patients with a pre-existing low white blood cell (WBC) count or a history of drug induced leukopenia/neutropenia should have their complete blood count monitored frequently during the first few months of therapy. In these patients, SEROQUEL should be discontinued at the first sign of a decline in WBC absent other causative factors. Patients with neutropenia should be carefully monitored, and SEROQUEL should be discontinued in any patient if the absolute neutrophil count is < 1000/mm<sup>3</sup>
- Precautions include the risk of seizures, orthostatic hypotension, and cataracts. Examination of the lens by methods adequate to detect
  cataract formation, such as slit lamp exam or other appropriately sensitive methods, is recommended at initiation of treatment, or
  shortly thereafter, and at 6-month intervals during chronic treatment

Please see additional Important Safety Information on adjacent pages, and Brief Summary of Prescribing Information, including Boxed Warnings, at the end of this ad. behavior completely within his control, or was there something different about his pattern of lies?

Lying is a common human trait defined by Merriam-Webster's Collegiate Dictionary as making "an untrue statement with intent to deceive." Selling<sup>3</sup> agreed, with an observation that "everyone lies and you can't stop them," and concluded, "of course, that is the truth."

PL is commonly referred to as

pseudologia phantastica (or pseudologia fantastica) and, less commonly, as mythomania, or morbid lying. It is not yet clear whether these different names refer to the same phenomenon, but they are often used interchangeably. Throughout this article, PL and pseudologia phantastica will be used synonymously.

Over the years, very little has been written on the epidemiology of PL. Although its prevalence in the general

population is unknown, one study of 1000 repeat juvenile offenders found a prevalence of close to 1%.<sup>1</sup> A review of 72 cases reported that the average age at onset of the lying behavior was 16 and the average age at discovery was 22.<sup>4</sup> The same review showed the sex ratio to be equal; the intelligence quotient (IQ) to be average or slightly below average, with significantly better verbal IQ than performance IQ; and a history of CNS abnormality in

40% of the cases, characterized by epilepsy, abnormal electroencephalographic findings, head trauma, or CNS infection.

PL is noted for the chronicity and frequency of the lies, and the apparent lack of benefit derived from them. The lies are easily disprovable tales that are often fantastic in nature and may be extensive, elaborate, and complicated. There often appears to be a blurring (Please see Pathological Lying, page 70)



#### Important Safety Information (continued)

- The most commonly observed adverse events associated with the use of SEROQUEL monotherapy versus placebo in clinical trials for schizophrenia and bipolar disorder were dry mouth (9%-44% vs 3%-13%), sedation (30% vs 8%), somnolence (18%-28% vs 7%-8%), dizziness (11%-18% vs 5%-7%), constipation (8%-10% vs 3%-4%), SGPT increase (5% vs 1%), dyspepsia (5%-7% vs 1%-4%), lethargy (5% vs 2%), and weight gain (5% vs 1%). The most commonly observed adverse events associated with the use of SEROQUEL versus placebo in clinical trials as adjunct therapy with lithium or divalproex in bipolar mania were somnolence (34% vs 9%), dry mouth (19% vs 3%), asthenia (10% vs 4%), constipation (10% vs 5%), abdominal pain (7% vs 3%), postural hypotension (7% vs 2%), pharyngitis (6% vs 3%), and weight gain (6% vs 3%)
- In long-term clinical trials of quetiapine, hyperglycemia (fasting glucose  $\geq$  126 mg/dL) was observed in 10.7% of patients receiving guetiapine (mean exposure 213 days) vs 4.6% in patients receiving placebo (mean exposure 152 days)

Data combined from two 8-week, multicenter, randomized, double-blind, placebo-controlled, monotherapy bipolar depression trials. SEROQUEL (300 mg/day; n=327) showed significant improvement from baseline in Montgomery-Asberg Depression Rating Scale total score at Week 1 continuing through Week 8 vs placebo (n=330; P values ≤0.0001).<sup>8</sup>
 <sup>†</sup> Data combined from two 12-week, multicenter, randomized, double-blind, placebo-controlled, monotherapy mania trials. SEROQUEL

(n=208) showed significant improvement from baseline in Young Mania Rating Scale (YMRS) total score at Day 4 continuing through Day 84 vs placebo (n=195; P values  $\leq 0.05$ ).<sup>6</sup>

<sup>+</sup> In pivotal mania trials, the average dose in responders (patients with ≥50% improvement in YMRS total score) was 600 mg/day. <sup>§</sup> Twice daily.

References: 1. Data on file, AstraZeneca Pharmaceuticals LP, DA-SER-51. 2. Prescribing Information for SEROQUEL. 3. Calabrese JR, Keck PE, Macfadden W, et al. Am J Psychiatry. 2005;162:1351-1360. 4. Thase ME, Macfadden W, Weisler RH, et al, for the BOLDER II Study Group. J Clin Psychopharmacol. 2006;26:600-609.
5. Endicott J, Rajagopalan K, Minkwitz M, et al, for the BOLDER Study Group. Int Clin Psychopharmacol. 2007;22:29-37. 6. Vieta E, Mullen J, Brecher M, et al. Curr Med Res Opin. 2005;21:923-934. 7. Sachs G, Chengappa KNR, Suppes T, et al. Bipolar Disord. 2004;6:213-223. 8. Data on file, AstraZeneca Pharmaceuticals LP, DA-SER-45.

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of the boundaries between fiction and reality. The magnitude, callousness, or consequences of the lying behavior are irrelevant. Even when there appears to be an external motive for the lies in PL, the lies are so out of proportion to the perceived benefit that most people would see them as senseless. Such characteristics of PL have led some researchers to conclude that the lying behavior appears to be a gratification in itself,5 the reward is internal (usually unconscious) to the liar, unlike ordinary lies, for which the expected reward is external.

# Controversy surrounding PL

The debate over the ability of pathological liars to recognize their lies as false has dogged this phenomenon for decades. Integral to the debate is the confusion emanating from questions about a pathological liar's ability to think logically. It has been observed that pathological liars believe their lies to the extent that the belief may be delusional. As a result, PL has been referred to as a "wish psychosis." Furthermore, PL has also been described as impulsive and unplanned.1 These observations have raised doubts about the pathological liar's ability to fully control his or her lying behavior. The

relative purposelessness of the lies, including the intangible benefits of false accusations or self-incrimination, and the repetitive nature of the lies, despite negative consequences to the liar's reputation and livelihood, further encourage doubts about the liar's ability to control his behavior.

On the other hand, it has been observed that vigorously and persistently challenging pathological liars may lead pathological liars to partially ac-

# **SEROQUEL** (quetiapine fumarate) TABLETS

BRIEF SUMMARY: For full Prescribing Information, see package insert

sed Mortality in Elderly Patients with Dementia-Related Psychosi

Efferty patients with demontia-related psychosis treated with atypical antipsychotic drugs are at an increased risk of death compare to placebo. Analyses of seventeen placebo-controlled trials (modal duration of 10 weeks) in these patients revealed a risk of death i the drug-ireated patients of between 1.6 to 1.7 times that seen in placebo-treated patients. Over the course of a typical 10 wee controlled trial, the rate of death in drug-treated patients was abult 4.5%, compared to a rate of about 2.6%, in the placebo group Although the causes of death were varied, must of the deaths appeared to be either cardiovascular (g., heart failure, sudden death) or infectious (eg., pneumonia) in nature. SEROOUEL (quetiapine) is not approved for the treatment of patients with Demontia-Relate Psychocic Psychosis

#### Suicidality and Antidepressant Drugs

Suicidality and Antidepressant Drugs Antidepressants increased the risk compared to placebo of suicidal thinking and behavior (suicidality) in children, adolescents, and young adults in short-term studies of major depressive disorder (MDD) and other psychiatric disorders. Anyone considering the use of SER0QUEL or any other antidepressant in a child, adolescent, or young adult must balance this risk with the clinical aneed. Short-term studies did not show an increase in the risk of suicidality with antidepressants compared to placebo in adults beyond age 24; there was a reduction in risk with antidepressants compared to placebo in adults aged 65 and dder. Depression and certain other psychiatric disorders are themselves associated with increases in the risk of suicidal. Automatic and worsening, suicidality, or unusual changes in behavior. Families and caregivers should be advised of the need for close observation and communication with the prescriber. SER0QUEL is not approved for use in pediatric paleries. (See Warnings: Clinical Worsening and Suicide Risk, Precautions: Information for Patients, and Precautions: Pediatric balaries. utions: Pediatric Use)

INDICATIONS AND USAGE Bipolor Disorder SER00UEL is indicated for the treatment of both: • depressive episodes associ-ated with bipolar disorder, • acute manic episodes associated with bipolar I disorder as either monotherapy or adjunct therapy to lithium or divalproex. Depression The efficacy of SER00UEL was established in two identical 8-week randomized, placebo-controlled double-blind clinical studies that included either bipolar I or II patients (see CLINCAL PHARMACOLOGY in full Prescribing Information). Effectiveness has not been systematically evaluated in clinical triats for more than 8 weeks. Mania The efficacy of SER00UEL in acute bipolar mania was established in two 12-week monotherapy trials and one 3-week adjunct therapy trial of bipolar I patients initially hospitalized for up to 7 days for acute mania (see CLINCAL PHARMACOLOGY in full Prescribing Information). Effectiveness has not been systematically evaluated in clinical triats for more therapy. The full hospitalized for up to 7 days for acute mania (see CLINCAL PHARMACOLOGY in full Prescribing Information). Effectiveness has not been systematically evaluated in clinical triats for more therapy. The short herapy that is the see SED00UEL in acute that acute day is in acute mania and the see stabilished in the see SED00UEL in acute acute mania (see CLINCAL PHARMACOLOGY in full Prescribing Information). Effectiveness has not been systematically evaluated in clinical triats for more than 12 weeks in monotherapy and 3 weeks in adjunct therapy. The physician who elects to use SEROQUEL for extended periods in bipolar disorder should periodically re-evaluate the long-term misks and benefits of the drug for the individual patient (see DOSAGE AND ADMINISTRA-TION). Schizophrenia SEROQUEL is indicated for the treatment of schizophrenia. The efficacy of SEROQUEL in schizophrenia was shed in short-term (6-week) controlled trials of schizophrenic inpatients (see CLINICAL PHARMACOLOGY in full Prescribing Information) The effectiveness of SEROQUEL in long-term use, that is, for more than 6 weeks, has not been systematically evaluated in co Therefore, the physician who elects to use SEROQUEL for extended periods should periodically re-evaluate the long-term usefulness of the drug for the individual patient (see DOSAGE AND ADMINISTRATION).

CONTRAINDICATIONS SEROQUEL is contraindicated in individuals with a known hyp

WARNINGS Increased Mortality in Elderly Patients with Dementia-Related Psychosis Elderly patients with dementia-related psychosis treated with atypical antipsychoic drugs are at an increased risk of leath compared to placebo. SEROUUEL (quetapine) is not approved for the treatment of patients with dementia-related psychosis (see Boxed Warning). Clinical Worsening and Suicade Risk Patients with major depression and/or the emergence of suicidal ideation and behavior (suicidality) or unusual changes in behavior, whether or not they are taking antidepressant and behavior the dependent and behavior (suicidality) or unusual changes in behavior, whether or not they are taking antidepressant dependent of the dependent and behavior (suicidality) or unusual changes in behavior, whether or not they are taking antidepressant depression. and/or the emergence of suicidal ideation and behavior (suicidality) or nuusual changes in behavior, whether or not they are taking antidepressant medications, and this risk may persist until significant remission occurs. Suicide is a known risk of depression and certain other psychiatric idsorders, and these disorders themeselves are the strongest predictors of suicide. There has been a long-standing concern, however, that anti-depressants may have a role in inducing worsening of depression and the emergence of suicidality in certain patients during the early phases of treatment. Pooled analyses of short-term placebo-controlled trials of antidepressant drugs (SSRIs and dhers) showed that these drugs there is distributed functions and behavior (suicidality in inducing a strong stro

Table 1

Age Range	Drug-Placebo Difference in Number of Cases of Suicidality per 1000 Patients Treated
	Increases Compared to Placebo
<18	14 additional cases
18-24	5 additional cases
	Decreases Compared to Placebo
25-64	1 fewer case
≥65	6 fewer cases

No suicides occurred in any of the pediatric trials. There were suicides in the adult trials, but the number was not sufficient to reach any usion about drug effect on suicide. It is unknown whether the suicidality risk extends to longer-term use, i.e., be ever, there is substantial evidence from placebo-controlled maintenance trials in adults with depression that the use c ssion that the use of antidepr delay the recurr nce of depression. All patients being treated with antidepressants for any indication should be mor observed closely for clinical worsening, suicidality, and unusual changes in behavior, especially during the initial few months of a course of drug therapy, or at times of dose changes, either increases or decreases. The following symptoms, anxiety, agitation, panic attacks , irritability, hostility, aggressiveness, impulsivity, akathisia (psychomotor restlessness), hy pomania, and mania, have been reported i adult and pediatric patients being treated with antidepressants for major depressive disorder as well as for other indications, both psychiatric and non-psychiatric. Although a causal link between the emergence of such symptoms and either the worsening of depression and/or the emergence of suicidal impulses has not been established, there is concern that such symptoms may represent precursors to emerging suicidality. Consideration should be given to changing the therapeutic regimen, including possibly discontinuing the medication, in patients whose depres-Consideration should be prevent or clarifying the relativity of the prevent of th sion is persistently worse, or who are experiencing emergent suicidality or symptoms that might be precursors to worsening depres systemic infection, etc.) and untreated or inadequately treated extrapyramidal signs and symptoms (EPS). Other important considerations in differential diagnosis include central anticholinergic toxicity, heat stroke, drug fever and primary central nervous system (CMS) pathology. ins in the

management of NMS should include: 1) immediate discontinuation of antipsychotic drugs and other drugs not essential to concurrent therapy; 2) intensive symptomatic treatment and medical monitoring; and 3) treatment of any concomitant serious medical problems for which specific treatments are available. There is no general agreement about specific pharmacological treatment regimens for MMS. If a patient requires anti-specific drug treatment after recovery from MMS, the optimal retirotochicon of drug therapy should be carefully considered. The patient should be carefully monitored since recurrences of NMS have been reported. **Tarcive Dyskinesia** A syndrome of potentially irreversible, involun-tary, dyskinetic movements may develop in patients treated with antipsychotic drugs. Although the prevalence of the syndrome appears to be highest among the dedrix, especially dedriv wome, it is impossible to rety upon prevalence estimates to predict. At the inception of antipsychotic treatment, which patients are likely to developing tartive dyskinesia and the likelihood that it will become inversible are believed to increase as the dyskinesia is unknown. The risk of developing tartive dyskinesia and the likelihood that it will become inversible are believed to increase as the dyskinesia, although the syndrome may remit, partially or completely, if antipsychotic treatment is withdram. Antipsychotic treatment, tiself, however, may suppress (or ratially suppress) the signs and symptoms of the syndrome and threeby may possibly mask the underlying process. The effect that symptomatic suppression has upon the long-term course of the syndrome do tantipsychotic treatment, should be rescribed in amanner that is most likely to minimize the occurrence of tardive dyskinesia approxibil treatments, SEROOUEL should be prescribed in amanner that is most likely to minimize the occurrence of tardive dyskinesia approxibil treatment should be eareful be considered. However, some patients may require treatment with SEROOUEL des management of NMS should include: 1) immediate discontinuation of antipsychotic drugs and other drugs not essential to concurrent therapy Hyperglycemia). Assessment of the relationship between atvoical antipsychotic use and olucose abnormalities is complicated by the possibilit eased background risk of diabetes mellitus in patients with schizophrenia and the increasing incidence of diabetes mellitus in the genera population. Given these confounders, the relationship between atypical antipsychotic use and hyperglycemia-related adverse events is no completely understood. However, epidemiological studies suggest an increased risk of treatment-emergent hyperglycemia-related adverse events in patients treated with the atypical antipsychotics. Precise risk estimates for hyperglycemia-related adverse events in patients treated with atypical antipsychotics are not available. Patients with an established diagnosis of diabetes melitus who are started on atypical antipsychotics should be monitored regularly for worsening of glucose control. Patients with risk factors for diabetes mellitus (eg, obesity, family history of diabetes) who are starting treatment with atypical antipsychotics should undergo fasting blood glucose testing at the beginning of treatment and periodically during treatment. Any patient treated with atypical antipsychotics should be monitored for symptoms of hyperglycemia lincluding polydipsis, polyuria, polyphagia, and weakness. Patients who develog symptoms of hyperglycemia during treatment with atypical antipsychotics should undergo fasting blood glucose testing. In some cases, hyperglycemia has resolved when the atypical antipsychotic was discontinued; however, some patients required continuation of antidiabetic treatment despite discontinuation of the suspect drug.

SEROQUEL<sup>®</sup> (quetiapine fumarate) Tablets

PRECAUTIONS General: Orthostatic Hypotension: SEROQUEL may induce orthostatic hypotension ass sonizzih diw hateise tachycardia and, in some patients, syncope, especially during the initial dose-trittation period, probably reflecting its cc-adrenergic antagonist properties. Syncope was reported in 1% (28/2665) of the patients treated with SEROQUEL, compared with 0.2% (2954) on placebo and about 0.4% (2/527) on active control drugs. SEROQUEL should be used with particular caution in patients with known cardiovascular disease (history ardial infarction or ischemic heart disease, heart failure or conduction abnormalities), cerebrovascular disease or conditions which would oose patients to hypotension (dehydration, hypovolemia and treatment with antihyper ns). The risk of orthostatic hypo tension and syncope may be minimized by limiting the initial dose to 25 mg bid (see **DOSAGE AND ADMINISTRATION**). If hypotension occurs during titration to the target dose, a return to the previous dose in the titration schedule is appropriate. Leukopenia, Neutropenia and Agranulocytosis: In clinical trial and postmarketing experience, events of leukopenia/ neutropenia have been reported temporally related to atypical antipsychotic agents, including SEROQUEL. Agranulocytosis (including fatal cases) has also been reported. Possible risk factors fo enia/neutropenia include pre-existing low white cell count (WBC) and history of drug induced leukopenia/neutropenia. Patients with a pre-existing low WBC or a history of drug induced leukopenia/neutropenia should have their complete blood count (CBC) monitored frequently pre-exsting low web, or a history of origi mulceo leukopentaneutropenta should have their complete blood could (Loc) monitored requently during the first term months of therapy and should discontinue SEROQUEL at the first sign of a decline in WBC in absence of other causative factors. Patients with neutropenia should be carefully monitored for fever or other symptoms or signs of infection and treated promptly if such symptoms or signs occur. Patients with severe neutropenia (absolute neutrophi iocunt <1000/mm<sup>3</sup>) should discontinue SEROQUEL and have their WBC followed until recovery (see ADVERSE REARCINDS). Claratexic: The development of cataractes: SeROQUEL and have their WBC followed until recovery (see ADVERSE REARCINDS). Claratexic: The development of cataractes: say observed in patients during long-term SEROQUEL treatment, but a causal relationship to SEROQUEL use has not been established. Nevertheless, the possibility of lenticular changes cannot be excluded at this time. Therefore, examination of the lens by methodix adequate to detect cataract formation, such as slit lamp exam or other appropriately sensitive methods, is recommended at initiation of treatment or shortly thereafter, and at 6 month intervals during chronic treatment. Seizures: During clinical trials, seizures occurred in 0.5% (20/3400) of patients treated with SEROQUEL compared to 0.2% (2954) on patienes baceb and 0.7% (40527) on active control drugs. As with other antipsycholics SEROQUEL should be used cautiously in patients with a history of seizures or with conditions that potentially lower the seizure threshold, eq. Alzheimer's dementa. Conditions that lower the seizure threshold may be more prevalent in a population of 59 years or idder. Hypothypotiates: (20% (24%) of SEROQUEL treatment was associated with a reversal of the effects on total and rest threshold at lacese, cesarion of SEROQUEL treatment was associated with a reversal of the offects on total and the thypothypotics (28/C4/M69) (SEROQUEL treatment was asociated with a reve during the first few months of therapy and should discontinue SEROQUEL at the first sign of a decline in WBC in absence of other causativ treated patients respectively compared to //a and to/k for pieceoo patients respectively. In topicar depression trais, the propriorin or patients with cholestero and tritypicarise detained in the level were 9% and 14% for SERODUCEI treated patients respectively, compared to 6% and 9% for placebo patients respectively. Hyperprolactinemia: Although an elevation of prolactin levels was not demonstrated in clinical trials with SERODUEL, increased protectin levels were observed in rat studies with this compound, and were associated with an increase in mammary gland engelsais in rats (see Carniogneers). Tsuse culture experiments indicate that approximatively one-third of human breast cancers are protactin dependent in vitro, a factor of potential importance if the prescription of these drugs is contemplated in a patient with previously detected breast dependent *in vitro*, a tactor of poternial importance if the prescription of these drugs is contemplate in a patient with previously detected pressi-cancer. Although disturbances such as galactorhea, amenorhea, gurecomsalta, and importence have been reported with protactin-levating compounds, the clinical significance of elevated serum protactin levels is unknown for most patients. Neither clinical studies nor epidemiologic studies conducted to date have shown an association between chronic administration of this class of drugs and tumorigneesis in humans; the available evidence is considered to onlinet to be conclusive at this time. **Transaninase Eventions**. Asymptomatic, transient and reversible elevations in serum transaminases (primarily ALT) have been reported. In schizophrenia trials, the proportions of patients with transaminase elevations in serum transaminases (primarily ALT) have been reported. In schizophrenia trials, the proportions of patients with transaminase elevations of >3 times the upper limits of the normal reference range in a pool of 3- to 6-week placebo-controlled trials were approximately 1% for SEROOUEL and placebo. These hepatic enzyme elevations usually occurred within the first 3 weeks of drug treatment and promptly returned to pre-study levels with ongoing treatment with SEROOUEL. In bipolar depression trials, the proportions of patients with transaminase elevations of >3 times the upper limits of the normal reference range in two 9-week placebo-controlled trials were approximately 1% for SEROOUEL and y for depatients with SEROOUEL and y for depatients of the normal reference range in two 9-week placebo-controlled trials were approximately 1% for SEROOUEL as placed in platents. Sensitive second transitive second second and second in platents second of the optical platents and transaminase elevations of patients on SEROOUEL especial during the 3-4 day period of initial dose-titration. In schizophrenia trials, somolence was reported in 18% of patients on SEROOUEL compared to 11% of cancer. Although disturbances such as galactorrhea, amenorrhea, gynecomastia, and impotence have been reported with prolactin-elevating established, other drugs with alpha-adrenergic blocking effects have been reported to induce priapism, and it is possible that SEROQUEL ma share this capacity. Severe priapism may require surgical intervention. Body Temperature Regulation: Although not reported with SEROQUEL sible that SEROQUEL may disruption of the body's ability to reduce core body temperature has been attributed to antipsychotic agents. Appropriate care is advised when prescribing SEROQUEL for patients who will be experiencing conditions which may contribute to an elevation in core body temperature, e.g., rcisina strenuously, expa ure to extreme heat, receiving concomitant medication with anticholinergic activity, or being subject to dehydration Dysphagia: Esophageal dysmotility and aspiration have been associated with antipsychotic drug use. Aspiration pneumonia is a common cause of morbidity and mortality in elderly patients, in particular those with advanced Alzheimer's dementia. SEROQUEL and other antipsychotic drugs

knowledge their lies, an observation that suggests the presence of logical thinking.6 Such a presentation is consistent with a view of PL as a fantasy lie, a daydream communicated as reality, told solely for the liar's pleasure.5 Although the fantasy lies may help the pathological liar escape from stressful life situations, or compensate for developmental traumas, there is evidence that individuals with PL show normal "guilty responses" when lying

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during a lie-detection test.7 It is perhaps an attempt at guilt reduction that motivates pathological liars to believe their lies, thereby creating a strange form of double bind.

The further observation that pathological liars usually have sound judgment in other matters and the observed association of PL with other criminal behavior in approximately half of the cases supports the notion of intact reality testing. The crimes associated

with PL include theft, swindling, forgery, and plagiarism.<sup>4</sup> It is worth noting, however, that some pathological liars are successful professionals without any public record of crime.

## **Differential diagnosis**

PL should be differentiated from other psychiatric conditions that have been associated with deception. This is complicated because lying behaviors that mimic PL have been described in

certain personality disorders and in factitious disorder. The core symptoms of those personality disordersantisocial, borderline, histrionic, and narcissistic-are often apparent. For example, the falsifications that may occur in borderline personality disorder (BPD) are not usually of the elaborate, fantastic, or complicated nature seen with PL. Patients with BPD often lack a consistent self-identity, hold (Please see Pathological Lying, page 72)

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should be used cautiously in patients at risk for aspiration pneumonia. Suicide: The possibility of a suicide attempt is inherent in bipolar disorder and schizophrenia; close supervision of high risk patients should accompany drug therapy. Prescriptions for SERDQUEL should be written for the smallest quantity of tablets consistent with good patient management in order to reduce the risk of overdose. In 2 eight-week finical studies in patients with bipolar depression (N-1048) the incidence of treatment emergent suicidal diation or suicide attempt was low and similar to placebo, (SERDQUEL 300 mg, 6/350, 17%; SERDQUEL 600 mg, 9/348, 2 5%; Placebo, 7/347, 2 0%). Use in Patients with Documinal Unders placebo, (SEROOUEL 300 mg, 6/350, 1.7%; SEROOUEL 600 mg, 9/349, 2.6%; Placebo, 7/347, 2.0%). Use in Patients with Concomitant Illness: Clinical experience with SEROUUEL in patients with certain concomitant systemic illnesses (see Reral Impairment and Hepatic Impatic Impairment and Hepatic Impatic Impatient Impatic Impatic Impatient Impatic Impatic Impatic Impatient Impatic Impat aggression, and suicidal ideation, especially early during antidepressant treatment and when the dose is adjusted up or down. Families and caregivers of patients should be advised to look for the emergence of such symptoms on a day-to-day basis, since changes may be abrupt. Such symptoms should be reported to the patient's prescriber or health professional, especially if they are severe, abrupt in onset, or were not part of the patient's presenting symptoms. Symptoms such as these may be associated with an increased risk for suicidal thinking and beh indicate a need for very close monitoring and possibly changes in the medication. Orthostatic Hypotension: Patients should be advised of the rist of orthostatic hypotension, especially during the 3-5 day period of initial dose titration, and also at times of re-initiating treatment or increases in dose. Interference with Cognitive and Motor Performance: Since somnolence was a commonly reported adverse event associated with SEROQUEL treatment, patients should be advised of the risk of somnolence, especially during the 3-5 day period of initial dose titration. Patients should be cautioned about performing any activity requiring mental alertness, such as operating a motor vehicle (including automobiles) or operating hazardous machinery, until they are reasonably certain that SEROQUEL therapy does not affect them adversely. **Pregnancy:** Patients should be calinored about performing any activity reguring mental alertness, such as operating hazardous machinery, until they are reasonably certain that SER00UEL hargy does not affect them adversely. **Program** (Patients should be advised to notify their physician if they become pregnant or intend to become pregnant during therapy. **Nursing**: Patients should be advised to notify their physician if they become pregnant or intend to become pregnant during therapy. **Nursing**: Patients should be advised to notify their physician if they are taking SER00UEL. **Concomitant Medication:** As with other medications, patients should be advised to avoid consuming alcoholic beerages while taking SER00UEL. **Haze transport** and they taking or plan to take, any prescription or over-the-counter drugs. **Atobic:** Patients should be advised to avoid consuming alcoholic beerages while taking SER00UEL. **Haze transport** and **Delytyration**. **Patients** should be advised to avoid consuming alcoholic beerages while taking SER00UEL at the resisting low WBC or a history of drug induced leukopenia/neutopenia should have their complete blood count (CBC) monitored while taking SER0ULL **Laboratory Tesis** Patients with a pre-existing low WBC or a history of drug induced leukopenia/neutopenia should have their complete blood count (CBC) monitored while taking SER0ULE Laboratory Tesis Patients with a pre-existing low WBC or a history of drug induced leukopenia/neutopenia should have their complete blood count (CBC) monitored while taking SER0ULE Laboratory Tesis Patients with a pre-existing low WBC or a history of drug induced leukopenia/neutopenia should have their complete blood count (CBC) monitored trequently during the first term months of therapy and should discontinue SER0ULEL at their step of the step of SER0ULE. Laboratory Tesis of taking SER0ULE in combination with other centrally caing drugs. SER0ULEL patients and the step of the drug blog and dephytic contributions of SER0ULE. Laboratore the step of the drug blog and dephytis. The SER or mean oral clearance. Imonazanie (zuo mg uoi) increased the oral clearance or quetrapine (suo mg uoi) goi-Sis-Cumentine: Administration or multiple daily doess of climetidine (do ng tid or 4 days) resulted in a 20% decrease in the mean oral clearance of quetrapine (150 mg tid). Dosage adjustment for quetrapine is not required when it is given with cimetidine. **P450 3A Inhibitors:** Coadministration of keto-conazole (200 mg once daily for 4 days), a potent inhibitor of cyclochrome P450 3A, reduced oral clearance of quetrapine (sub-33%); forcase is indicated with a comparison of the clearance of quetrapine (sub-sited and the rinhibitors of cyclochrome P450 3A (e.g., itraconazole, microarable, expthromyon, and protease inhibitors). **Fluoretine** *Clearance* (100 mg tid) and the clearable of cyclochrome P450 3A (e.g., itraconazole, microarable, expthromyon, and protease inhibitors). **Fluoretine** ketocnazole and other inhibitors of cytochrome P450 3A (e.g., traconazole, tiuconazole, erythromycin, and protese inhibitors). Fluoretine, Imipramine, Haloperidol, and Risperidone: Coadministration of fluoxetine (60 mg once daily); imipramine (75 mg bid), haloperidol (75 mg bid), or risperidone (3 mg bid) with quetapine (300 mg bid) did not alter the steady-state pharmacokinetics of quetapine. Effect of Gueticpine on Other Drugs Lorazepam: The mean oral clearance of lorazepam (2 mg, single dose) was reduced by 20% in the presence of quetapine administered as 250 mg tid dosing. Divalpree: The mean maximum concentration and extent of absorption of total and free valproic axid a tseady-state were decreased by 10 to 12% when divalproex (500 mg bid) was administered with quetapine (150 mg bid). The mean oral clearance of total valproic axid (administered as divalproex 500 mg bid) was increased by 11% in the presence of quetapine (150 mg bid). The changes were not significant. Lifutium: Concomitant administration of quetapine (250 mg bid) was and of the steady-state pharmacokinetic parameters of liftium. Antipyrine: Administration of multiple daily doses up to 750 mg/day (on a tid schedule) of quetapine to subjects with selected psychotic disorders had no clinically relevant effect on the clearance of antipyrine or uniany recovery of antipyrine metabolism. These results indicate that quetapine does not 15 gardificantly induce hepatic enzymes resonsible for cytochrome P450 mediated metabolism of antipyrine. Carcinogenesis, Mutogenesis, Impoirment of Fertility: Carcinogenesis: Carcinogenicity studies were conducted in G578L mice and Wistar rats. Ouetlapine was administered in the diet to mice at doses of 20, 75, 250, and 750 mg/dg and to rats by gardage at doses of 250 mg/dg or 3.0 mg and 750 mg/dg and 1.0, 15, 15, and 4 5 times the maximum human dose na mg/m<sup>2</sup> basis (mcie) or 0.3, 0.9, and 3.0 times the maximum human dose on a mg/m<sup>2</sup> basis. Mammary gland adenocarcinomas were statistically significantly increased in Imipramine, Haloperidol, and Risperidone: Coadministration of fluoxetine (60 mg once daily); imipramine (75 mg bid), halope ncidence of prolactin-mediated mammary gland tumors in rats to human risk is unknown (see Hyperprolactinemia in PRECAUTIONS, General) Mutagenesis: The mutagenic potential of quetiapine was tested in six in vitro bacterial gene mutation assays and in an in vitro mammalian gene mutation assay in Chinese Hamster Ovary cells. However, sufficiently high concentrations of quetiapine may not have been used for all tester strains. Quetiapine did produce a reproducible increase in mutations in one Salmonella typhimurium tester strain in the presence of metabolic activation. No evidence of clastogenic potential was obtained in an *in vitro* chromosomal aberration assay in cultured human lymphocytes or in the *in vivo* micronucleus assay in rats. Impairment of Fertility: Quetiapine decreased mating and fertility in male Sprague-Dawley rats at oral the *in vivo* micronucleus assay in rats. **Impairment of Fertility**: Quetiapine decreased mating and fertility in male Sprague-Dawley rats at oral does of 50 and 150 mg/kg or 0.5 and 1.8 times the maximum human dose on a mg/m<sup>2</sup> basis. Drug-related effects included increases in interval to mate and in the number of matings required for successful impregnation. These effects continued to be observed at 150 mg/kg or en after a two-week period without treatment. The no-effect dose for impaired mating and fertility in male rats was 25 mg/kg or 0.3 times the maximum human dose on a mg/m<sup>2</sup> basis. Our-related effects included increases in interval to mate and in the number of matings resulting in pregnancy, and an increase in the interval to mate. An increase in irregular estrus cycles was observed at doses of 10 and 50 mg/kg or 0.1 and 0.6 times the maximum human dose on a mg/m<sup>2</sup> basis. Ther orefet dose in female tarks was 1 mg/kg or 0.0 times the maximum human dose on a mg/m<sup>2</sup> basis. Ther orefet dose in female tarks was 1 mg/kg or 0.0 times the maximum human dose on a mg/m<sup>2</sup> basis. Ther orefet dose in female tarks was 1 mg/kg or 0.0 times the maximum human dose on a mg/m<sup>2</sup> basis. Ther orefet dose in female tarks was 1 mg/kg or 0.0 times the maximum human dose on a mg/m<sup>2</sup> basis. Ther orefet dose in female tarks was 1 mg/kg or 0.0 times the maximum human dose on a mg/m<sup>2</sup> basis. Ther orefet dose in female tarks was 1 mg/kg or 0.0 times the maximum human dose on a mg/m<sup>2</sup> basis. Ther orefet dose in female tarks was 1 mg/kg or 0.0 times the maximum human dose on a mg/m<sup>2</sup> basis. There orefet dose in female tarks was 1 mg/kg or 0.0 times the maximum human dose on a mg/m<sup>2</sup> basis. There was detected in rat at doses of 50 and 2.0 to the times the maximum human dose on a mg/m<sup>2</sup> basis. There was a mg/m<sup>2</sup> basis in ratio basis of ratio basis or ratio basis at 200 mg/kg or 2.0 and 100 mg/kg (2.4 times the maximum hum

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decreases in body weight gain and/or death) was observed at the high dose in the rat study and at all doses in the rabbit study. In a peri/postnata reproductive study in rats, no drug-related effects were observed at doses of 1, 10, and 20 mg/kg or 0,010, 012, and 0.24 times the maximum human dose on a mg/m<sup>2</sup> basis. However, in a preliminary peri/postnatal study, there were increases in fetal and pup death, and decreases in mear litter weight at 150 mg/kg, or 3.0 times the maximum human dose on a mg/m<sup>2</sup> basis. There are no adequate and well-controlled studies in litter veight at 150 mg/kg, or 3.0 times the maximum human dose on a mg/m<sup>2</sup> basis. There are no adequate and well-controlled studies in pregnant women and quetapine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus. Labor and Delivery: The effect of SEROUEL on babor and delivery in humans is unknown. Nursing Muchines: SEROUEL was excreted in milk of treated animals during lactation. It is not known if SEROUEL is excreted in human milk. It is recommended that women receiving SEROUEL should not breast teed. Pediatric Use: The safety and effectiveness of SEROUEL in pediatric patients have not been established. Anymoe considering the use of SEROUEL in a child or adolescent must balance the potential risks with the chincal ned. Gerlainic Use: 01 the approximately 3700 patients in clinical studies with SEROUEL, 7% (232) were 65 years of age or over. In general, there was no indication of any different toler-ability of SEROUEL in a child or adolescent must blance the potential risks with the chincal ned. Gerlainic Use: 01 the approximately 3700 patients in clinical studies with SEROUEL, 7% (232) were 65 years of age or over. In general, there was no indication of any different toler-ability of SEROUEL in the didry compared to younger adults. Nevertheless, the presence of factors that might decrease pharmacokinetic clearance, increase the pharmacokynamic response to SEROUEL, or cause porer tolerance or orthostasis, should lead to consideration of a User starting dose, slower titration, and careful monitoring during the initial dosing period in the elderly. The mean plasma clearance SEROUEL was reduced by 30% to 50% in elderly patients when compared to younger patients (see **Pharmacokinetics** under **CLINICAL PHARMACOLOGY in full Prescribing Information and DOSAEE AND ADMINISTRATION**).

#### ADVERSE REACTIONS

Adverse Event Hypotensio

ADVERSE REACTIONS
The information below is derived from a clinical trial database for SEROQUEL consisting of over 3700 patients. This database includes 698
patients exposed to SEROQUEL for the treatment of bipolar depression, 405 patients exposed to SEROQUEL for the treatment of acute bipolar
mania (monotherapy and adjunct therapy) and approximately 2600 patients and/or normal subjects exposed to 1 or more doses of SEROQUEL
for the treatment of schizophrenia. Of these approximately 2600 patients and/or normal subjects exposed to 1 or more doses of SEROQUEL
for the treatment of schizophrenia. Of these approximately 3700 subjects, approximately 3400 (2300 in schizophrenia, 406 in acute bipolar
mania dos 390 in bipolar depression) were maintent who may also effectiveness this, and their expensione corresponded to approximately 992.6 patient-years. The conditions and duration of treatment with SEROQUEL varied greatly and included (in overlapping categories)
open-kale and double-blind phases of studies, inpatients and ourtpatients, fixed-dose and dose-thration studies, and short-error of longererm
or longererm open-label and double-blind phases of studies, inpatients and outpatients, twed-does and dose-tirtation studies, and short-term or longer-term exposure. Adverse reactions were assessed by collecting adverse events, results of physical examinations, vilki signs, weights, laboratory analyses, ECGs, and results of ophthalmologic examinations. Adverse events during exposure were obtained by general inquiry and recorded by clinical investigators using terminology of their own choosing. Consequently, it is not possible to provide a meaningful estimate of the proportion of individuals experiencing adverse events white first grouping similar types of events into a smaller number of standardized event categories. In the tables and tabulations that follow, standard COSTART terminology has been used to classify reported adverse events for schizophrenia and bipolar mania. MedDRA terminology has been used to classify reported adverse events for bipolar depression. The stated frequencies of adverse events represent the proportion of individuals who experienced, at least once, a treatment-emergent adverse event of the type listed. An event was events represent the proportion of individuals with experienced, at least once, a treatment-emergent adverse event of the type label. An event was considered treatment emergent if it occurred for the first time or worsened while receiving therapy following baseline evaluation. Adversee Findings Observed in Short-Term, Placebo-Controlled Trials Adverse Events Associated with Discontinuations of freatment in Short-Term, Placebo-Controlled Trials Bipdar Disorder. Depression: Overall, discontinuations due to adverse events were 12.3% for SEROULEL 300 mg vs 19.0% for SEROULE 400 mg and 5.2% for placebo. Mania: Overall, discontinuations due to adverse events were 5.7% for SEROULEL vs. 5.1% for placebo in monotherapy and 3.6% for SEROULE vs. 5.9% for placebo in adjunct therapy. Schizophrenia: Overall, there was little difference in the incidence of discontinuation due to adverse events (4% for SEROULEL vs. 3% for placebo) in a pool for controlled trials. However, discontinuations due to somnolence and hypotension were considered to be drug related (see PRECAUTIONS): 3% for placebo (see PRECAUTI

SEROQUEL	Placebo
0.8%	0%
0.4%	0%
ccurring at an Incidence of 1% or More Among SEROQUE	L Treated Patients in Short-Term, Placebo-Controlled Trials: Th
he owere that the figures in the tables and tabulations con-	act he used to predict the insidence of side effects in the source (

Adverse Events prescriber should be aware that the figures in the tables and tabulations cannot be used to predict the incidence of side effects in the course of usual medical practice where patient characteristics and other factors differ from those that prevailed in the clinical trials. Similarly, the cided frequencies cannot be compared with figures obtained from other clinical investigations involving different treatments, uses, and investigators. The cited figures, however, do provide the prescribing physician with some basis for estimating the relative contribution of drug and nondrug factors to the side effect incidence in the population studied. Table 2 enumerates the incidence, rounded to the nearest percent, of treatment, emergent adverse events that occurred during acute therapy of schröppfreumic (up to 5 weeks) in 1% or more of patients treated with SEROQUEL (doese ranging from 75 to 800 mg/day) where the incidence in patients treated with SEROQUEL was greater than the incidence in placebo-treated patients.

#### Table 2. Treatment-Emergent Adverse Experience Incidence in 3- to 12-Week Placebo-Controlled Clinical Trials

tor the Treatment of Schizophrenia and Bipolar Mania (monotherapy)									
Body System/Preferred Term	SEROQUEL (n=719)	PLACEBO (n=404)	Body System/Preferred Term	SEROQUEL (n=719)	PLACEBO (n=404)				
Body as a Whole			Metabolic and Nutritional						
Headache	21%	14%	Weight Gain	5%	1%				
Pain	7%	5%	SGPT Increased	5%	1%				
Asthenia	5%	3%	SGOT Increased	3%	1%				
Abdominal Pain	4%	1%	Nervous						
Back Pain	3%	1%	Agitation	20%	17%				
Fever	2%	1%	Somnolence	18%	8%				
Cardiovascular			Dizziness	11%	5%				
Tachycardia	6%	4%	Anxiety	4%	3%				
Postural Hypotension	4%	1%	Respiratory						
Digestive			Pharyngitis	4%	3%				
Dry Mouth	9%	3%	Rhinitis	3%	1%				
Constipation	8%	3%	Skin and Appendages						
Vomiting	6%	5%	Rash	4%	2%				
Dyspepsia	5%	1%	Special Senses						
Gastroenteritis	2%	0%	Amblyopia	2%	1%				
Gamma Glutamyl									
Transpeptidase Increased	1%	0%							

Events for which the SER0QUEL incidence was equal to or less than placebo are not listed in the table, but included the following: accidental injury, akathisia chest pain. couph increased, depression, diarrhea, extrapyramidal syndrome, hostility, hypertension, hypertonia, hypotension, nicreased appetite, infection n increased, depression, diarrnea, extrapyramidai syndrome, nosuiny, nypertension, nypertonia, nypoi penia, malaise, nausea, nervousness, paresthesia, peripheral edema, sweating, tremor, and weight loss.

In these studies, the most commonly observed adverse events associated with the use of SEROQUEL (indication of 5% or greater) and observed at rate on SEROULEL at least twice that of placebo were somolence (18%), dizinses (11%), dry mouth (9%), constipation (8%), SSPT increased (5%), weight gain (5%), and dyspepsia (5%). Table 3 enumerates the incidence, rounded to the nearest percent, of treatment-emergent adverse events that occurred during therapy (up to 3-weeks) of acute mania in 5% or more of patients treated with SEROQUEL (doese ranging from 100 to 800 mg/day) used as adjunct therapy to lithium and divalproex where the incidence in patients treated with SEROQUEL was greater than the incidence in placebo-freated patients.

#### Table 3. Treatment-Emergent Adverse Experience Incidence in 3-Week Placebo-Controlled Clinical Trials

for the lreatment of Bipolar Mania (Adjunct Therapy)									
Body System/ Preferred Term	SEROQUEL (n=196)	PLACEBO (n=203)	Body System/ Preferred Term	SEROQUEL (n=196)	PLACEBO (n=203)				
Body as a Whole	. ,	. ,	Metabolic and Nutritional	. ,	. ,				
Headache	17%	13%	Weight Gain	6%	3%				
Asthenia	10%	4%	Nervous						
Abdominal Pain	7%	3%	Somnolence	34%	9%				
Back Pain	5%	3%	Dizziness	9%	6%				
Cardiovascular			Tremor	8%	7%				
Postural Hypotension	7%	2%	Agitation	6%	4%				
Digestive			Respiratory						
Drv Mouth	19%	3%	Pharyngitis	6%	3%				
Constipation	10%	5%							

Events for which the SEROQUEL incidence was equal to or less than placebo are not listed in the table, but included the following: akathisia, diarrhea

# CLINICAL

# Pathological Lying Continued from page 71

contradictory views of themselves that alternate frequently, often make false threats, and are prone to false accusations of maltreatment and/or abandonment. Conversely, pathological liars do not show the intense affective dysregulation or suicidal behaviors that characterize BPD. In antisocial personality disorder, the lies are often for

external gain, and there is a history of conduct disorder in childhood, unlike in PL. Furthermore, the lying behavior in PL covers a wider context than in factitious disorder, in which lying is solely for the purpose of assuming a sick role.

Other conditions that could be confused with PL include malingering, Ganser syndrome, and confabulation. The elaborate and complicated fantasies seen in PL do not occur in

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Ganser syndrome, where the lies are limited to approximate answers, or in confabulation (which may be part of the descriptive symptoms of Wernicke-Korsakoff syndrome), where falsifications are used to cover memory gaps. Furthermore, there is no organically derived amnesia in PL as exists in confabulation. The feature that differentiates malingering from PL is the motivation for lying; obvious external incentives alone drive the lies in

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gastroenteritis, gastritis, hemorrhoids, stomatitis, thirst, tooth caries, fecal incontinence, gastroesophageal reflux, gum hemorrhoge, mouth

gassienens, gassies, minimitarius, standaus, misk, orden alles, read incominence, gassiesephagar reink, gui menomage, mouni luceration, redit hemorrhage, tongue dema; Raze: glossifis, hematemesis, intestinal obstruction, melena, pan-ratilis. Cardiovascular System: Frequent: palpitation; Infrequent: vasodilatation; OI interval prolonged, migraine, bradycardia, cerebral ischemia, irregular pulse, T wave abnormality, bundle branch block, cerebrovascular accident, deep thrombophlebitis, T wave inversion; Raze: angina pectoris, atrial fibrillation; AV

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DRUG ABUSE AND DEPENDENCE Controlled Substance Class: SEROQUEL is not a controlled substance. Physical and

DRUG ABOSE AND DEPENDENCE controlled substance class: Schoubel is not a controlled substance. Physical and Psychologic Dependence: SERGOUEL has not been systematically sublicit, in animals or humans, for its potential for abuse, tolerance or physical dependence. While the clinical trials did not reveal any tendency for any drug-seeking behavior, these observations were not systematic and it is not possible to predict on the basis of this limited experience the eduent to which a CNS-active drug will be misused, diverted, and/or abused once marketed. Consequently, patients should be evaluated cardituly for a history of drug abuse, and such patients should be observed closely for signs of misuse or abuse of SEROQUEL, e.g., development of tolerance, increases in dose, drug-seeking behavior.

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malingering, unlike in PL, where the motivation to lie is less clear.

Delusions should be considered in the differential diagnosis because of controversial propositions that the lies told in PL rise to delusional proportions. Unlike PL, however, delusions are not intentional lies told to deceive. but rather, they are fixed beliefs that happen to be false. The blurring of fact and fiction that occurs in PL is not the same as the absolute conviction that occurs in persons with delusions.

## Other diagnostic conundrums

In their seminal report, Healy and Healy<sup>1</sup> argued that true PL occurs in the "absence of definite insanity, feeblemindedness, or epilepsy," an opinion that indicates PL is not secondary to another psychiatric disorder. This opinion has not been universally accepted; counter arguments posit that PL is always secondary to a recognizable psychiatric disorder.3 The only mention of PL in DSM is as a nonessential symptom of factitious disorder. Ironically, lying to assume a sick role is considered important enough to warrant a diagnostic label; but PL, which, like factitious disorder, has an unconscious motive, is not.

It is becoming increasingly clear, however, that there are individuals with PL who have no preexisting psychiatric disorder. For example, Judge Couwenberg's psychiatrist expert witness diagnosed pseudologia phantastica. Going back in history, Cleckley<sup>8</sup> described the case of a successful and respected man with a doctorate in physics who had pseudologia phantastica in the absence of insanity or psychopathy. Consequently, Dike and colleagues9 have suggested that PL should be categorized as primary PL or secondary PL, depending on the absence or presence, respectively, of a preexisting psychiatric disorder that might be responsible for the lying behavior.

If PL cannot be considered a clinical entity in its own right, could it be seen as a subset of the impulse control disorder spectrum, given the impulsive nature of the lies? Alternatively, does the observation that pathological liars feel compelled to lie repeatedly, or have obsessional falsifications (according to Fenichel<sup>10</sup>), warrant a consideration of PL as an obsessivecompulsive disorder? A more controversial consideration would be whether there are subtypes of pathological lying that may fit into a special category of delusional disordersespecially in those whose reality testing is suspect. To suggest, however, that PL is a psychotic disorder would seem preposterous to most psychiatrists because individuals exhibiting

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In these studies, the most commonly observed adverse events associated with the use of SEROOUEL (incidence of 5% or greater) and observed In these studies, the induced on the studies of the studies of the studies of the studies of the induced of the studies of the treated patients.

lable 4.	Ireatment	i-Emergent	Adver	se	Exp	erien	cel	nciae	Ince	e in a	B-Week	Placebo	-Controlled	i Clinical I	rials
					-					-					

for the treatment of bipotar Depression								
Body System/Preferred Term	SEROQUEL (n=698)	PLACEBO (n=347)	Body System/Preferred Term	SEROQUEL (n=698)	PLACEBO (n=347)			
Gastrointestinal Disorders			Metabolism and Nutrition Disorders	s				
Dry Mouth	44%	13%	Increased Appetite	5%	3%			
Constipation	10%	4%	Nervous System Disorders					
Dyspepsia	7%	4%	Sedation	30%	8%			
Vomiting	5%	4%	Somnolence	28%	7%			
General Disorders and			Dizziness	18%	7%			
Administrative Site Conditions			Lethargy	5%	2%			
Fatique	10%	8%	Respiratory. Thoracic, and Mediastinal Disorders					
			Nasal Congestion	5%	3%			

Events for which the SEROQUEL incidence was equal to or less than placebo are not listed in the table, but included the following: nausea, upper respiratory
tract intection, and headache.

<sup>14</sup> Levins of minut negative transmission of the set sum proceeds net relevant in the table, put included the totoming, messel, pupper regulatory tract infection, and headable.
In these studies, the most commonly observed adverse events associated with the use of SEROQUEL (incidence of 5% or greatery) and observed at a rate on SEROQUEL at least twice that of placebo were dry mouth (44%), seation (30%), somolence (28%), dizziness (18%), constipation (10%), lettargy (5%), and nasa congestion (5%). Explorations for interactions on the basis of gender, age, and race did not reveal any clinically meaningful differences in the adverse event. Courrence on the basis of these demographic factors. Dose Dependency of Adverses Events in Short-Term, Placebo-Controlled Triols Dase-related Adverse Fems: Spontaneously elicited adverse event data from a study of schizophrenia comparing five fixed doses of SEROQUEL (75 mg, 150 mg, 300 mg, 600 mg, and 750 mg/day) to placebo were explored for dose-relateding lain, and verigely tight, in: Extrapyramidal Symptoms: Systolian Class Effect: Symptoms of dystolia (24s) for the following adverse events: togistic regression analyses revealed a positive dose response (p < 30.5) the following diverse events: options include: spasm of the neck muscles, sometimes progressing to tightness of the threat, swallowing direluly, difficulty, hypertonia, hypokinesia, neck rigidity, and tremor), and 3) use of anticholin ergic medications to treat emergent EPS

SERUQUEL						
Dose Groups	Placebo	75 mg	150 mg	300 mg	600 mg	750 mg
Parkinsonism	-0.6	-1.0	-1.2	-1.6	-1.8	-1.8
EPS incidence	16%	6%	6%	4%	8%	6%
Anticholinergic medications	14%	11%	10%	8%	12%	11%

In six additional placebo-controlled clinical trials (3 in acute mania and 3 in schizophrenia) using variable doses of SEROUUEL, there were no differences between the SEROUUEL and placebo treatment groups in the incidence of EPS, as assessed by Simpson-Angus total scores, spontaneous complaints of EPS and the use of concomitant anticholinergic medications to treat EPS. In two placebo-controlled clinical trials for the treatment of bipolar depression using 300 mg and 600 mg of SEROUUEL, the incidence of adverse events toge, admissia, extrapyramidal disorder, tremor, dyskinesia, dystonia, restlessness, muscle contractions involutary, psychomotor hyperactivity and muscle rigidity) were generally low and did not exceed 4% in any treatment group. The 3 treatment groups were similar in mean change in SAS total score and BARS flobAssessment score at the end of treatment. The use of concomitant anticholinergic medications was infrequent and admisar across the three treatment groups. Virtal Signs and Lobocratory Studies Stall Sign Changer: SEROUEL is associated with orthostatic hypotension (see **PRECAUTIONS**). Weight Gain: In schizophrenia trials the proportions of patients meeting a weight gain criterion of ≥7% of body weight were compared in a pool of four 2- to 6-week placebo-controlled clinical trials, revealing a statistically significantly greater incidence of weight were 21% compared to 7% for placebo. In biplar depression trials, the proportions of patients meeting the same weight criterion were 11% compared to 7% for placebo. In biplar depression trials, the proportions of patients meeting the same weight criterion were 12% compared to 2% for placebo. Laboratory Changes: A sussessment for and trials the reproduced of a the incidence of a least one occurrence of neutrophil count <1.0x 109/L among patients with a normal baseline neutrophil count and at least one available follow up laboratory messures in both total cholesterol and trig/verides (see **PRECAUTIONS**). In placebo controlled monotherary clinis the ent In six additional placebo-controlled clinical trials (3 in acute mania and 3 in schizophrenia) using variable doses of SEROQUEL, there were no have been observed. Hyperglycemia. In 2 long-term placebo-controlled clinical trials, mean exposure 213 days for SEROULEI. (646 patients) and 152 days for placebo (680 patients), the exposure adjusted rate of any increased blood glucose level (≥126 mg/dL) for patients more than 8 hours since a meal was 18.0 per 100 patient years for SEROULEI. (10.7% of patients) and 9.5 for placebo per 100 patient parasers (4 6%) of patients). In short-term (12 weeks duration or less) placebo-controlled (inicial trials (3342 patients) treated with SEROQUEL and 1490 treated with placebo), the percent of patients who had a fasting blood glucose ≥126 mg/dL or a non fasting blood glucose ≥200 mg/dL was 3.5% for quetiapine and 2.1% for placebo. In a 24 week trial (active-controlled, 115 patients treated with SEROQUEL) designed to evaluate glycemic status with oral glucose tolerance testing of all patients, at week 24 the incidence of a treatment-emergent post-glucose challenge glucose level  $\geq$ 200 mg/dL was 1.7% and the incidence of a fasting treatment-emergent blood glucose level  $\geq$ 126 mg/dL was 2.6%. **ECG** gluccse level ≥200 mg/dL was 1.7% and the incidence of a fasting treatment-emergent blood glucose level ≥126 mg/dL was 2.6%. ECG **Changes:** Between group comparisons for pooled placebo-controlled trials revealed no statistically significant SER00UEL/placebo differences in the proportions of patients meeting the criteria for tachycardia were compared in four3 - to 6-week placebo-controlled clinicals. However, the proportions of patients meeting the criteria for tachycardia were compared in four3 - to 6-week placebo-controlled clinical trials for the treatment of schizophrenia revealing a 1% (4099) incidence for SER00UEL compared to 0.6% (1/165) incidence for placebo. In acute (monotherapy) bipolar main trials the proportions of patients meeting the criteria for tachycardia weo 0.5% (1/192) for SER00UEL compared to 0% (0/171) incidence for placebo. In bipolar depression trials, no patients had heart rate increases to >120 beats per minute. SER00UEL compared to 0% (0/171) incidence for placebo. In bipolar depression trials, no patients had heart rate increases to >120 beats per minute. SER00UEL compared to 0% (0/171) incidence for placebo. In bipolar depression trials, no gatients had heart rate increases to >120 beats per minute. SER00UEL compared to 0% (0/171) incidence for placebo. In bipolar depression trials, norge the PCAurketing Evolucation of SEROQUEL compared to 200 beats per minute. SER00UEL Compared to 200 beats per minute. SER00UEL Setter BECAUTIONS, Other Adverse Events Observed During the Pre-Marketing Evolucation of SEROQUEL Lower BECAUTIONS. Other Adverse Events Observed During the Pre-Marketing Evolucation of SEROQUEL Lower base of the attriant treated with SER00UEL at multiple doese ≥75 mg/day during any placed triad within the premarketing database of approximately 2200 patients treated with SER00UEL at multiple doese >25 mg/day during any placed treads will at the related with a resonable adverse events are those occurring in 1/100 to 1/1000 patients, nervees a treads to be uninformative. It Changes: Between group comparisons for pooled placebo-controlled trials revealed no statistically significant SEROQUEL/placebo differences in suicide attempt, malaise, photosensitivity reaction, chills, face ede ma, moniliasis; Rare; abdomen enlarged, Digestive System; Frequent anorexia; Infrequent: increased salivation, increased appetite, gamma glutamyl transpeptidase increased, gingivitis, dysphagia, flatulence

\*adjusted for gend

DOSAGE AND ADMINISTRATION Bipolar Disorder Depression Usual Dose: SEROQUEL should be administered once daily at bedtime to reach 300 mo/day by day 4. ising S Day 1 Day 2 Day 3 Day 4 50 mg 100 mg 200 mg 300 mg

In the cinical trials supporting effectiveness, the dosing schedule was 50 mg, 100 mg, 200 mg and 300 mg/day for days 1-4 respectively. Patients receiving 600 mg increased to 400 mg on day 5 and 600 mg on day 8 (Week 1). Antidepressant efficacy was demonstrated with SEROQUEL at both 300 mg and 300 mg/day for days 1-4 respectively. Patients digunct theragy (with lithium or divalprex), SEROQUEL should be initiated in bid does to 100 mg day. Day 1 hore and 100 mg/day 100 mg/day 0 mg and 300 mg/day. To additional benefit was seen in the 600 mg group. Mania Usual Dose: When used a monotherapy or day in high divided doses. Further dosage adjustments up to 800 mg/day. Day 6 should be initiated above 800 mg/day has not bene evaluated in divided doses. Further dosage adjustments up to 800 mg/day. Day 6 should be initiated above 800 mg/day has not bene evaluated in divided. Miss. Schizophrenia Usual Dose: SEROQUEL should generally be administered with an initial dose of 25 mg bid, with increases in increments of 25-50 mg bid or thid on the second and third day, as to better a vibration the orthor day above for the orthor day above the orthor day on bay a fourth area down above 200 mg/day. To a target dose and the majority of an the respectively and third day, as to better extended to the second and third day, as to better extended to the second and third day, as to better extended to a function decage adjustments up to accurate the accurate the majority of a tributenes down above 200 mg/day. To a target dose and third day are bound above the second and third day are bound above the second and third day are bound above the torthe day above the second and third day are bound above the torthe day above the second and third day are bound above the torthe available and the majority of the second and third day are bound above the second and the day are bound above the second and the day are bound above the second and the torthe available the second and the torthe available the second and the torthe available above the second a range of 300 to 400 mg daily by the fourth day, given bid or tid. Further dosage adjustments, if indicated, should generally occur at intervals o not less than 2 days, as steady-state for SEROQUEL would not be achieved for approximately 1-2 days in the typical patient. When dosage adjustments are necessary, dose increments/decrements of 25-50 mg bid are recommended. Most efficacy data with SEROQUEL were obtained using tid regimens, but in one controlled trial 225 mg bid was also effective. Efficacy in solizophrenia was demonstrated in a dose range of 150 to 750 mg/day in the clinical trials supporting the effectiveness of SEROQUEL. In a dose response study, doses above 300 mg/day were not the of one does not be a set of the state of Situation of given has not used initiation and a voter larger used in the control run in parameter more to control that and the scalable predisposition to hypothesive reactions (see CLINEL-PHARMACOLOGY in full Prescripting Information). When indicated, dose escalation should be performed with caution in these patients. Patients with hepatic impairment should be started on 25 mg/day. The dose should be increased daily in increments of 25-50 mg/day to an effective dose, depending on the clinical response and toterability of the patient. The nation of quetiapine was enhanced in the presence of phenytoin. Higher maintenance doses of quetiapine may be required when it is coad stered with phenytoin and other enzyme inducers such as carbamazepine and phenobarbital (See Drug Interactions under PRECAUTIONS) ministered with phenytoin and other enzyme inducers such as carbamazepine and phenobarbital (See Drug Interactions under PECAUTIONS). Maintenance Treatment: While there is no body of evidence available to answer the question of how long the patient treated with SEROQUEL stoud be maintained, it is generally recommended that responding patients be continued beyond the acute response, but at the lowest dose needed to maintaine diversion. Patients should be periodically reassessed to determine the need for maintenance treatment. Reinitation of Treatment in Patiens Previous/D Josonniumed: Hhlong there are no data to specifically address erinitation or treatment, it is recommended that when restarting patients who have had an interval of less than one week off SEROQUEL, fitzation of SEROQUEL is not required and the maintenance dose may be reinitiated. When restarting therapy of patients who have been off SEROQUEL for more than one week, the initial tratitation schedule skolude be followed. Switching from Antipsycholitis: There are no systematizing localected data to specifically address venicitian to specifically address venicitian on the specifically address venicitiand to specifically address venicitiand and discontinuation patients with schizophrenia from antipsycholitis to SEROQUEL, or concerning concomitant administration should be minimized. When switching patients with schizophrenia from depot antipsycholitis to SEROQUEL for some patients with schizophrenia, more gradual discontinuation may be most appropriate for others. In all cases, the period of overlapping antipsycholitis attributionstation should be minimized. When switching patients with schizophrenia from depot antipsycholitis, if medically appropriate, initiate SEROQUEL therapy in place of the next scheduled injection. The need for continuing existing EPS medication should be reevaluated periodically.

AstraZeneca

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# CLINICAL-

PL often function well in many spheres of daily living.

Although the cause of PL is unknown, there are increasing associations with CNS dysfunction. As noted earlier, 40% of 72 individuals with pseudologia phantastica had a history of CNS abnormalities.<sup>4</sup> In another study, single photon emission CT showed right hemithalamic dysfunction in a patient with pseudologia phantastica.<sup>11</sup>

The most recent study involved the use of structural MRI in 12 individuals identified as "liars."<sup>12</sup> The liars group comprised 4 subgroups: malingering group, PL group (PL was defined using the Hare Psychopathy Checklist-Revised), individuals with conning/manipulative behavior, and individuals who met the deceitfulness criteria for DSMIV. The study found a 22% to 26% increase in the prefrontal white matter and a 36% to 42% reduction in prefrontal gray-to-white ratios in the liars group compared with antisocial controls and normal controls. The main flaw of this study was that although half of the liars group had a diagnosis of malingering and only a small number had PL, the liars group was frequently interchanged with the pathological liars as if they were the same. In addition, PL was defined using the Hare Psychopathy Checklist, an indication that the few pathological liars included in the study were those with criminal behavior and psychopathy. To ascribe observations from this study to PL is therefore problematic and misleading; PL and malingering are different entities, and most pathological liars are not psychopaths.

There is no specific psychological test for PL. However, psychological tests would help in elucidating the presence of personality disorders, other major psychiatric illnesses, or malingering.

PL has been at the fringes of psychiatric practice for more than a century. It is not surprising, therefore, that it remains ill understood and poorly researched. The increasing interest in the phenomenon in recent years, and the availability of high-tech radiological investigations may reverse this trend and help answer the many questions that have dogged this phenomenon. Despite the fact that psychiatrists are slowly converging on a uniform definition of PL, it remains unclear whether it is a mental disorder or merely behavioral excess. Associated questions involve the treatability of the phenomenon, available treatment modalities, and outcome of treatment. A psychiatrist representing Judge Couwenberg's defense team opined that pseudologia phantastica was treatable with therapy but did not state the basis for his assertion.

## Treatment

The options available for treating PL have been poorly researched. The treatment modality mainly discussed in the literature is psychotherapy. However, there are no systematic studies on the effectiveness of psychotherapy in treating PL and no discussion of pharmacotherapy or any other types of interventions. It is possible that there may be a subset of pathological liars for whom pharmacotherapeutic options may help in reducing impulsivity or the compulsions associated with the urge to lie. In addition, further investigation of CNS abnormalities may lead to other therapeutic interventions.

To fully embark on an exploration of treatment options for PL, however, it should first be recognized as a diagnostic entity. PL currently exists as a common but unessential symptom of factitious disorder. As in other medical or psychiatric conditions, emphasis is usually on the treatment of the condition as a whole and not necessarily the treatment of its individual symptoms. Therefore, PL should be recognized as a diagnostic entity to encourage research into its treatment.

The possible consequences of PL for the liar are severe. All relationships of the liar are at risk for destruction resulting from lack of trust and credibility. The shame of socially or formally interacting with others in the company of a spouse who lies repeatedly could overwhelm the relationship. In the workplace, as their lying behavior becomes increasingly clear to their colleagues, pathological liars stand the risk of bearing the brunt of rude jokes, being alienated, or being fired. In clinical situations, the therapist has the arduous task of overcoming not only the negative countertransference of treating a habitual liar but also the frustrations of not knowing which of the patient's statements are true.

Although most individuals affected with PL may not have cause to seek treatment and may indeed continue to lead highly successful and productive lives, it is not uncommon for their lies to cause them hardship through clashes with the law or other authorities, with resulting adverse consequences. For example, a purposeless false accusation, a recognized presentation of PL, is a criminal behavior for which the pathological liar may be prosecuted. This type of false accusation should be differentiated from false accusations for revenge purposes, or those that may occur in mass hysteria (for example, the Salem witchcraft phenomenon), in which a false idea generates intense anxiety that quickly

spreads and may lead to baseless accusations.

# **Forensic issues**

It is perhaps in the forensic psychiatric arena that the need to clearly define PL is most urgent. The immediate question in these settings would revolve around the issue of competency of the pathological liar to stand trial. The criteria for being competent to stand trial include an ability to work collaboratively with one's attorney in order to confront one's accusers. A defendant who lies frequently and repeatedly to his attorney would ultimately confuse the attorney, making it difficult to formulate a sound strategy of defense.

Another problem is the risk of the pathological liar being accused of perjury when he gives false testimony under oath. In the case of Judge Couwenberg, the State of California Commission of Judicial Performance noted that he did not have a mental condition that excused or mitigated his behavior. The commission concluded that the mere presence of a symptom without any mental disorder is of little legal consequence.

It is easier to argue that PL is not a delusion than it is to say that pathological liars always have control over their lies. Koppen<sup>13</sup> observed that the lie ultimately wins power over the pathological liar, so that mastery of his own lies is lost. In addition, PL has a compulsive or impulsive quality. Would it be feasible to say that in some cases the lying behavior was uncontrollable? Such a conclusion, when combined with recent evidence of possible CNS abnormalities in PL, would raise doubts about the degree of responsibility of pathological liars when their lies lead to criminal behavior.

## Conclusion

In conclusion, PL is a special form of lying, narrow in its definition and complicated in its presentation. Its apparent rarity may be the consequence of lack of awareness of the phenomenon by clinicians. Unfortunately, it periodically causes significant hardship to the pathological liar. Psychiatrists confronted with pathological liars should complete a thorough clinical evaluation and obtain a longitudinal history of their lies, especially through collateral information from relatives, friends, and employers. In addition to psychotherapeutic treatment, psychiatrists should consider research into the usefulness of pharmacotherapy for impulsivity or compulsive behaviors in these patients.

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