

**DVD Label:**

Headline: **Tolerability and Quetiapine**

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**DVD Content:**

Headline: **Tolerability and Quetiapine**

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Dr. Marie-Josée Filteau – Quebec City, Quebec  
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Dr. Pierre Chue – Edmonton, Alberta

Headline: **Chapter 2: Metabolic Abnormalities**

Narration/Visual:

Dr. Lau is an endocrinologist and a professor of medicine, biochemistry and molecular biology, and chair of the Diabetes and Endocrine Research Group at the University of Calgary.

Subhead: Introduction

Moderator: Dr. Lau, what are the possible factors that might influence patient adherence? Is there a correlation between patient adherence and tolerability of the treatment regimen?

Dr. Lau: Patient adherence may be linked to tolerability of the treatment regimen. Metabolic abnormalities, including weight gain, hyperglycaemia and type 2 diabetes mellitus, are of particular concern given the degree of co-morbidity with which these conditions are associated.

Narration: This segment will provide an overview of these metabolic abnormalities, including preventative measures to help mitigate the effects of these disorders.

Subhead: Weight Gain

Moderator: What contributes to the treatment-related weight gain, and how common is it in patients undergoing treatment? Does the weight gain occur rapidly or is it progressive over time?

Dr. Lau: While the pathophysiology of treatment-related weight gain is not well understood, weight gain is experienced by many patients. Typically this weight gain is progressive, occurring over a six month period. Some patients, however, continue to gain weight even after this time. While few studies have been conducted specifically on treatment-related weight gain, the effects of obesity are well documented and are thought to be generally similar to those found in patients with treatment-related weight gain.<sup>2,5</sup>

Moderator: What are the risks of obesity-related problems, and are certain populations predisposed to developing obesity-related conditions?

Dr. Lau: Obesity has been linked with an increased risk of cardiovascular disease, hypertension, several kinds of cancer, osteoarthritis, sleep apnea and type 2 diabetes mellitus. The risks of obesity-related co-morbidities are confounded by certain population characteristics that may predispose patients to even higher risk levels. Patients with schizophrenia have disproportionately higher levels of other cardiovascular risk factors such as sedentary lifestyles, unhealthy diets, and smoking.<sup>2,5,7</sup>

Visual: Up to 80% of schizophrenic patients smoke

Subhead: Weight gain and patient management

Moderator: What should be the focus of patient management in relationship to weight control?

Dr. Lau: The focus of patient management should be on the prevention of weight gain since it is often very difficult for patients to lose weight once gained.<sup>2</sup> It is recommended that this management begin with the clinician checking both the current body weight, weight history, and body mass index (BMI), and waist circumference during the initial assessment, with regular monitoring throughout treatment. Generally, assessing body weight, waist circumference, BMI and blood pressure every visit for 6 months and quarterly thereafter is recommended.<sup>2</sup> A comprehensive treatment plan should also include dietary, or healthy eating, and counselling for regular physical activity. If BMI increases by 10% or more, blood glucose and lipid profile should be monitored. If the weight gain is rapid, weighing weekly and then monthly is suggested. In the event that profound and rapid weight gain occurs, the risks and benefits of continuing the drug should be considered.<sup>3</sup>

Narration:

Narrator speaks  
to the chart:

This table summarizes the suggested physical and laboratory assessments for evaluating health status in patients with schizophrenia, including studies that may facilitate detection of concomitant physical conditions such as obesity, and evaluate conditions related to other specific side effects of treatment such as hyperglycemia.<sup>2</sup>

Since schizophrenia is associated with an increased risk of diabetes, care must be taken by monitoring for the signs and symptoms of this disorder, and increases in weight gain, which may in turn contribute to the problem.<sup>5,7</sup>

It is recommended that during the initial assessment the clinician starts by documenting the current body weight, height, waist circumference, and body mass index (BMI). This should be followed-up by a BMI monitoring every visit for 6 months and at least quarterly thereafter.<sup>2</sup>

Due to an increased risk of treatment-emergent hyperglycemia-related adverse events,<sup>4</sup> a clinician should consider screening patients for diabetes risk factors and test fasting blood glucose during the initial assessment, with regular monitoring throughout treatment. Generally, it is recommended to assess fasting blood glucose or hemoglobin A1c four months after initiating new treatment and then annually thereafter.<sup>2</sup>

Table to be graphically shown as the narrator speaks:

Assessment	Initial or Baseline	Follow-up
Assessments to monitor physical status and detect concomitant physical conditions		
Body weight and height	Body weight, height, waist circumference, and body mass index (BMI)	BMI every visit for 6 months and at least quarterly thereafter
Assessments related to other specific side effects of treatment		
Diabetes	Screening for diabetes risk factors; fasting blood glucose	Fasting blood glucose or hemoglobin A1c at 4 months after initiating a new treatment and annually thereafter

Chart Note: Adapted from the American Psychiatric Association.<sup>2</sup>

Subhead: Hyperglycaemia and Diabetes

Moderator: Is there a link between antipsychotic therapy and an increased risk of hyperglycaemia-related adverse events?

Dr. Lau: Epidemiological studies have shown that antipsychotic therapy is associated with an increased risk of hyperglycaemia-related adverse events.<sup>4</sup> Evaluating this link is complicated by the fact that schizophrenia is also a risk factor for type 2 diabetes. The incidence of this disease is at least 3 times higher in patients with schizophrenia than in the general population. This information is based on 1991 data, and involved the assessment of over 20,000 individuals with schizophrenia for the prevalence of diabetes. The rate of diagnosed diabetes in this population was 9 to 14%, which exceeded the rates for the general population.<sup>7</sup>

Moderator: In addition to antipsychotic therapy, are there other risk factors for developing or having undiagnosed diabetes?

Dr. Lau: There are also several other factors that increase the risk of a patient developing or having undiagnosed diabetes. These factors include: age  $\geq$  40 years, first-degree relative with diabetes, member of high-risk population (for example, people of Aboriginal, Hispanic, South Asian, Asian or African descent), presence of complications associated with diabetes, history of gestational diabetes mellitus (GDM), history of delivery of a large infant (greater than 9lbs), or problems associated with metabolic syndrome. Problems associated with metabolic syndrome include: history of impaired glucose tolerance (IGT) or impaired fasting glucose (IFG), vascular disease, hypertension, dyslipidemia, overweight, abdominal obesity, polycystic ovary syndrome, and acanthosis nigrans.<sup>2,7</sup>

Subhead: Hyperglycaemia, Diabetes and Patient Management

Moderator: What measures are recommended to help identify and control treatment-related exacerbation of pre-existing conditions such as diabetes, and hyperglycaemia-related adverse events?

Dr. Lau:

As with other antipsychotics, treatment-related exacerbation of pre-existing diabetes, hyperglycaemia, diabetic ketoacidosis, or coma including some fatal cases have been reported very rarely (<0.01%), sometimes in patients with no reported history of hyperglycaemia.<sup>4</sup>

Patients should be monitored for symptoms of hyperglycaemia, which include increased thirst (polydipsia), frequent urination (polyuria), and weight loss despite a good appetite (polyphagia), along with weakness. Prior to treatment, patients should have baseline fasting blood glucose and lipid profile. In some cases discontinuation of treatment has resolved the hyperglycaemia; in other cases the hyperglycaemia continued after the suspected drug was stopped, requiring the continuation of anti-diabetic therapy.<sup>4</sup>

Occasionally, diabetic ketoacidosis has been known to present in a patient without a previous history of diabetes. Diagnosis can be particularly difficult in such instances, as the mental status changes symptomatic of diabetic ketoacidosis can be attributed to the underlying mental disorder, such as schizophrenia. The overall prevalence and mechanism of diabetic ketoacidosis and other hyperglycaemia-related adverse events is unknown.<sup>2</sup>

Subhead: Quetiapine

Moderator: How significant is treatment-related weight gain?

Dr. Lau: In controlled clinical trials with quetiapine, weight gain with treatment was mild to moderate and appeared to be independent of dose. During acute therapy for schizophrenia (up to 6 weeks), only 2% of quetiapine treated patients experienced significant weight gain. Of this 2%, the mean weight gain was 2.3 kg vs. a mean weight loss of 0.1 kg with placebo.<sup>4</sup>

Visual: n=427

Subhead: Conclusions

Moderator: What should be a priority when considering patient management?

Dr. Lau: Prevention of weight gain should be a priority when considering patient management since weight loss can be very difficult for many patients.<sup>2</sup> The problem of weight gain is confounded by underlying risk factors which predispose many patients to weight gain and associated co-morbidities, including cardiovascular disease. Further, since schizophrenia is associated with an

increased risk of diabetes, care must be taken by monitoring for the signs and symptoms of this disorder and increases in weight gain which may in turn contribute to the problem.<sup>5,7</sup>

Headline: **Chapter 3: Movement Disorders**

Narration/Visual:

Dr. Richard Williams is a Director of Schizophrenia Services at the Royal Jubilee Hospital in Victoria, British Columbia. He is also a Clinical Professor in the Department of Psychiatry at the University of British Columbia and an Adjunct Professor in the Department of Psychology at the University of Victoria, British Columbia. In addition, Dr. Williams is the academic leader for the Department of Psychiatry for the Island Medical Program at the University of British Columbia, since the inception of the program in Victoria. Dr. Williams has approximately 40 publications in schizophrenia research on cost effectiveness, epidemiology, pharmacology and movement disorders.

Subhead: Introduction

Moderator: Dr. Williams, what are the possible factors that might influence patient adherence? Is there a correlation between patient adherence and tolerability of the treatment regimen?

Dr. Williams: Patient adherence may be linked to tolerability of the treatment regimen. Consideration of medication-induced movement disorders is especially important for treatment management as these conditions can lead to non-adherence with therapy and cause significant distress—including occupational and social impairments—for patients receiving treatment.<sup>1</sup>

Narration: The following segment is an overview of some of these movement disorders and the low incidence of EPS associated with the atypical antipsychotic quetiapine. Understanding the nature of EPS may help to limit these adverse reactions, thus increasing tolerability and patient adherence.

Subhead: Extrapyramidal Symptoms (EPS)

Moderator: How many medication-induced movement disorders have been identified, and what are they?

Dr. Williams: The DSM-IV defines several medication-induced movement disorders, including:

- Neuroleptic-Induced Acute Akathisia
- Neuroleptic-Induced Parkinsonism
- Neuroleptic-Induced Tardive Dyskinesia (TD)
- Neuroleptic Malignant Syndrome (NMS)

Subhead: 1. Neuroleptic-induced acute akathisia

Dr. Williams:

The first of these syndromes, neuroleptic-induced akathisia, is characterized by subjective complaints of restlessness, and objectively by one or more of the following: fidgety movements or swinging of the legs while seated, walking on the spot or rocking from foot to foot, pacing, or an inability to stay still for several minutes or more, ie, increased motor activity. Subjective complaints may be described as inner restlessness, a compulsion to move one's legs, and dysphoria, irritability, aggression and suicide attempts. Symptoms of akathisia generally present within 4 weeks of beginning treatment or increasing the dose of the medication, or occasionally after reducing the dose of the medication used to treat EPS.<sup>1,2</sup>

The distress resulting from the symptoms of akathisia can be significant, even in its milder manifestations. It is a frequent cause of non-adherence with therapy.<sup>1,2</sup>

Subhead: 2. Neuroleptic-induced parkinsonism

Dr. Williams:

Another commonly encountered medication-induced movement disorder is parkinsonism. The main feature of this syndrome is the presence of Parkinsonian symptoms including tremor, muscular rigidity, or akinesia.

Some behavioural symptoms associated with parkinsonism include depression and worsening of the negative symptoms of schizophrenia. There seems to be an increased risk of parkinsonism with older age, coexisting delerium, dementia, amnesic disorder, or a neurological condition.<sup>1</sup>

Subhead: 3. Tardive dyskinesia

Dr. Williams:

The third disorder is tardive dyskinesia, a potentially irreversible syndrome that may develop in some patients. The clinical manifestations of tardive dyskinesia include involuntary, large amplitude chorio athactoid movements. It has been hypothesized that antipsychotic drugs with a lower incidence of EPS may have lower tardive dyskinesia liability.<sup>4</sup> It is thought that the risk of developing tardive dyskinesia is associated with the duration of time and cumulative dose to which a patient has been exposed. However, the syndrome has developed in some patients, although rarely, after low-dose, brief treatment periods. The syndrome may remit partially or completely if antipsychotic drug use is ceased, but in some patients is irreversible.<sup>4</sup>

Subhead: 4. Neuroleptic malignant syndrome (NMS)

Dr. Williams:

Lastly, neuroleptic malignant syndrome (NMS) is a rare but potentially fatal symptom complex that has been reported in association with antipsychotic drug use including quetiapine. The symptoms of NMS are hyperthermia, muscle rigidity altered mental status, and evidence of autonomic instability. If after recovery from NMS a patient requires antipsychotic drug treatment, a potential reintroduction of drug therapy should be carefully considered. Patients must be monitored closely if drug therapy is reintroduced as recurrences of NMS have occurred.<sup>4</sup>

Subhead: Quetiapine

Moderator: Is there an association between quetiapine and the incidence of extrapyramidal symptoms (EPS)?

Dr. Williams: Quetiapine is an atypical antipsychotic, and it has a low incidence of extrapyramidal symptoms (EPS). The low EPS liability was demonstrated in one short-term acute phase clinical trial in patients with schizophrenia, where 5 fixed doses of quetiapine were compared with placebo

Visual: (n~50).

Dr. Williams: The patients were assessed for extrapyramidal symptoms according to the following criteria: 1) spontaneous reports of Parkinsonian symptoms, including extrapyramidal symptoms, hypertonia, tremor and cogwheel rigidity or akathisia; 2) Simpson-Angus scores (as measured by the mean change from baseline); and 3) use of anticholinergic medication to treat the emergent extrapyramidal symptoms. Through these assessments it was found that the incidence of EPS with the use of quetiapine was no different than placebo across the treatment groups, as illustrated by this table:<sup>4</sup>

Narration:

Narrator speaks to the chart:

This table illustrates the occurrence of treatment-emergent extrapyramidal symptoms, assessed by spontaneous reports of Parkinsonian symptoms and akathisia, Simpson Scale, and incidence of anticholinergic use. There was no difference between quetiapine and placebo treatment groups in the incidence of extrapyramidal symptoms or concomitant use of anticholinergics, and no evidence of dose-related increase in extrapyramidal symptoms across the dose range of 75-750 mg/day:<sup>4</sup>

Table to be graphically shown as the narrator speaks:

	Placebo	75 mg	150 mg	300 mg	600 mg	750 mg
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Spontaneous reports of Parkinsonian symptoms*	10%	6%	4%	4%	8%	4%
Spontaneous reports of akathisia	8%	2%	2%	0%	0%	2%
Simpson Scale	-0.6	-1.0	-1.2	-1.6	-1.8	-1.8
Incidence of anticholinergic use	14%	11%	10%	8%	12%	11%

\*Patients may have had more than one parkinsonism adverse event.

Subhead: Conclusions

Moderator: What is a treatment-related source that may affect patient adherence?

Dr. Williams: Extrapyramidal symptoms are often especially disturbing to patients and may represent a source of patient non-adherence.<sup>1</sup> Ongoing vigilance with respect to patient monitoring is especially important not only for efficacy but also adverse events associated with treatment.

#### ALTERNATIVE

Moderator: How do movement disorders side effects affect patient adherence?

Dr. Williams: Extrapyramidal symptoms, particularly akathisia, are distressing to patients and frequently lead to medication non-adherence.<sup>1</sup> Ongoing vigilance with respect to patient monitoring is especially important not only for efficacy but also adverse events associated with treatment.

Headline: **Chapter 4: Prolactin Elevation and Sexual Dysfunction**

Narration/Visual:

Dr. Marie-Josée Filteau is an Associate Clinical Professor at Laval University in Quebec. Also she is a Director of the Marie-Fitzbach Clinic, and a Clinical researcher, at the Centre de Recherche Université Laval-Robert-Giffard.

Subhead: Introduction

Moderator: Dr. Filteau, what are the possible factors that might influence patient adherence? Is there a correlation between patient adherence and tolerability of the treatment regimen?

Dr. Filteau: Patient adherence may be linked to tolerability of the treatment regimen. Monitoring for hyperprolactinemia and its effects on sexual dysfunction may be important for patient adherence and treatment management.

Narrator: The following segment is an overview of prolactin elevation, sexual dysfunction and the profile of quetiapine in relation to these adverse events. Understanding hyperprolactinemia and sexual dysfunction may help to limit these adverse reactions, thus increasing tolerability and patient adherence.

Subhead: Prolactin Elevation

Moderator: How common is the treatment-related elevation in prolactin levels, and does it affect men and women equally?

Dr. Filteau: Prolactin elevation is common in patients, and females seem to be more sensitive to the effects of prolactin elevation than males. Hyperprolactinemia produces many effects on sexual function, including breast tenderness, breast enlargement and galactorrhea, which can affect both men and women.<sup>2,4</sup> Since prolactin is responsible for regulating gonadal function, elevated levels of prolactin may decrease levels of estrogen and testosterone.<sup>2</sup>

Subhead: Manifestations of Hyperprolactinemia

Moderator: What are the effects of increase in prolactin levels?

Dr. Filteau: The effects of elevated prolactin levels and associated decreased gonadal hormone levels may manifest themselves in several ways. Women may experience amenorrhea, the cessation of menstrual periods, or menorrhagia, excessive or overly long menstrual periods, as a result of decreased gonadal hormones.<sup>2</sup> Both men and women may experience decreased libido and impaired sexual function, including anorgasmia.<sup>2,8</sup>

The long-term effects of hyperprolactinemia are not well understood. There have, however, been suggested links between an increased risk of breast cancer in postmenopausal women and exposure to medications that potentially elevate prolactin, based on epidemiological evidence. Chronic decreases in gonadal hormone levels may also increase the risk of osteopenia and osteoporosis, but causal links between increased risk of these disorders and antipsychotic use have not been established.<sup>2</sup>

It is suggested that patients are screened at the initial or baseline assessment for symptoms of hyperprolactinemia, and for prolactin levels, if indicated on the basis of clinical history.<sup>2</sup> Follow-up should consist of screening for symptoms of hyperprolactinemia at each visit until stable. Prolactin level should also be measured at follow-up visits if indicated on the basis of clinical history.<sup>2</sup> According to the Canadian Clinical Practice Guidelines for the Treatment of Schizophrenia, if hyperprolactinemia-related side-effects do occur, a risk-benefit assessment of the patient's current treatment should be performed. This assessment should focus on treatment of the patient overall, not the prolactin level.<sup>3</sup>

Subhead: Quetiapine

Moderator: Is the elevation in prolactin level significant when compared to placebo?

Dr. Filteau: In a clinical study comparing multiple fixed doses of quetiapine with placebo in patients with schizophrenia, it was found that quetiapine was no different than placebo across the recommended dose range regarding change in prolactin concentration at the end of the study.<sup>4,6\*†</sup>

Narration:

Narrator speaks  
to the chart:

This table summarizes the study results represented as change from baseline in plasma prolactin concentration at endpoint. There were no significant differences in changes of prolactin concentrations from baseline between quetiapine (regardless of dose) vs. placebo (p=0.871).<sup>6\*†[p 243, table 6]</sup>

Table to be graphically shown as the narrator speaks:

	Placebo	Quetiapine				
Plasma Prolactin (ng/mL) (mean)	(n=19)	75 mg (n=19)	150 mg (n=25)	300 mg (n=31)	600 mg (n=28)	750 mg (n=28)
Baseline	11.84	10.00	17.12	12.03	9.93	17.25
Adjusted change (from ANCOVA)	1.99	-0.51	-2.10	-0.21	-0.76	-1.93
P value vs. placebo		.969	.734	.971	.930	.749

\*6-week, double-blind, randomized, multicentre, placebo-controlled trial comparing five fixed doses of quetiapine (75 mg/day, n=53; 150 mg/day, n=48; 300 mg/day, n=52; 600 mg/day, n=51 or 750 mg/day, n=54), and a standard dose of haloperidol (12 mg/day, n=52) vs. placebo (n=51).<sup>6</sup>

†There were no significant differences in changes of prolactin concentrations from baseline between quetiapine (regardless of dose) vs. placebo (p=0.871).

Subhead: Conclusions

Moderator: What may be an important consideration in patient management?

Dr. Filteau: Assessing patients for the specific side effects of a treatment regimen is an important first step in deciding what is most appropriate for a particular patient, given that side effects can represent a source of patient non-adherence.<sup>2</sup> Ongoing vigilance with respect to patient monitoring is especially important not only for efficacy but also adverse events associated with treatment.

Headline: **Chapter 5: Patient Adherence and Tolerability**

Narration/Visual:

Dr. Pierre Chue is currently in full-time clinical practice as an Associate Clinical Professor in the Department of Psychiatry at the University of Alberta and Senior Clinical Coordinating Psychiatrist for Mental Health Community Programs in Edmonton. Dr. Chue is also the Co-Director of the Clinical Trials and Research Program of Alberta Hospital Edmonton.

Subhead: Metabolic Abnormalities

Moderator: Dr. Chue, what should be a priority when considering patient management?

Dr. Chue: Prevention of weight gain should be a priority when considering patient management since weight loss can be very difficult for many patients. The problem of weight gain is confounded by underlying risk factors which predispose many patients to weight gain and associated co-morbidities, including cardiovascular disease. Further, since schizophrenia is associated with an increased risk of diabetes, care must be taken by monitoring for the signs and symptoms of this disorder and increases in weight gain which may in turn contribute to the problem.

Narration:

Narrator speaks  
to the chart:

This table summarizes the suggested physical and laboratory assessments for evaluating health status in patients with schizophrenia, including studies that may facilitate detection of concomitant physical conditions such as obesity, and evaluate conditions related to other specific side effects of treatment such as hyperglycemia.<sup>2</sup>

Since schizophrenia is associated with an increased risk of diabetes, care must be taken by monitoring for the signs and symptoms of this disorder, and increases in weight gain, which may in turn contribute to the problem.<sup>5,7</sup>

It is recommended that during the initial assessment the clinician starts by documenting the current body weight, height, waist circumference, and body mass index (BMI). This should be followed-up by a BMI monitoring every visit for 6 months and at least quarterly thereafter.<sup>2</sup>

Due to an increased risk of treatment-emergent hyperglycemia-related adverse events,<sup>4</sup> a clinician should consider screening patients for diabetes risk factors and

test fasting blood glucose during the initial assessment, with regular monitoring throughout treatment. Generally, it is recommended to assess fasting blood glucose or hemoglobin A1c four months after initiating new treatment and then annually thereafter.<sup>2</sup>

Table to be graphically shown as the narrator speaks:

<b>Assessment</b>	<b>Initial or Baseline</b>	<b>Follow-up</b>
Assessments to monitor physical status and detect concomitant physical conditions		
Body weight and height	Body weight, height, waist circumference and body mass index (BMI)	BMI every visit for 6 months and at least quarterly thereafter
Assessments related to other specific side effects of treatment		
Diabetes	Screening for diabetes risk factors; fasting blood glucose	Fasting blood glucose or hemoglobin A1c at 4 months after initiating a new treatment and annually thereafter

Chart Note: Adapted from the American Psychiatric Association.<sup>2</sup>  
Practice Guidelines for Treatment (Schizophrenia)

Subhead: Motor Disorders

Moderator: What is a major treatment-related source that may affect patient adherence?

Dr. Chue: Extrapyrimal symptoms are often especially disturbing to patients and may represent a source of patient non-adherence.<sup>1</sup> Ongoing vigilance with respect to patient monitoring is especially important not only for efficacy but also adverse events associated with treatment.

It has been recognized by both the Canadian and American Psychiatric Associations that quetiapine is accompanied by a lower EPS liability. This consideration should be taken into account when choosing what may be best for your patient.<sup>2,3</sup>

Subhead: Prolactin Elevation and Sexual Dysfunction

Moderator: What are the effects of increase in prolactin levels?

Dr. Chue: Assessing patients for the specific side effects of treatment is an important first step in deciding what is most appropriate for a particular patient. The effects of hyperprolactinemia can be very upsetting to patients. Ongoing vigilance with respect to patient monitoring is especially important not only for efficacy but also adverse events associated with treatment.<sup>2</sup>

It has been recognized by both the Canadian and American Psychiatric Associations that quetiapine is accompanied by a low incidence of hyperprolactinemia and associated sexual dysfunction. This consideration should be taken into account when choosing what may be best for your patient.<sup>2,3</sup>

Moderator: What are the recommended physical and laboratory assessments related to specific side effects of treatment?

Narrator speaks to the chart:

According to the American Psychiatric Association it is recommended that patients are assessed for diabetes, hyperprolactinemia, extrapyramidal symptoms, including akathisia and tardive dyskinesia, using suggested physical and laboratory assessments related to specific side effects of treatment.<sup>2</sup>

A clinician should consider screening patients for diabetes risk factors and fasting blood glucose during the initial assessment, with regular monitoring throughout treatment. Generally, it is recommended to assess fasting blood glucose or hemoglobin A1c four month after initiating new treatment and annually thereafter.<sup>2</sup>

At initial assessment a patient should also be screened for symptoms of hyperprolactinemia, followed-up at each visit until stable, and then tested yearly, if treated with an antipsychotic known to increase prolactin. In addition, if indicated on the basis of clinical history, a serum prolactin level should be determined at initial visit or baseline, and followed-up at subsequent visits.<sup>2</sup>

Clinical assessment of extrapyramidal side effects, including akathisia, should be performed initially prior to treatment, followed by weekly assessments during acute treatment until antipsychotic dose is stable for at least 2 weeks, and then at each clinical visit during stable phase.<sup>2</sup>

In screening for tardive dyskinesia, clinical assessment of abnormal involuntary movements should be performed initially, and then every 6 months in patients taking first-generation antipsychotics and every 12 months in those taking second-generation antipsychotics. Patients at an increased risk, should be assessed every 3 months if treated with first- generation antipsychotics, and every 6 months with second-generation antipsychotics<sup>2</sup>

Table to be graphically shown as the narrator speaks:

Assessment	Initial or Baseline	Follow-up
Diabetes	Screening for diabetes risk factors; fasting blood glucose	Fasting blood glucose or hemoglobin A1c at 4 months after initiating a new treatment and annually thereafter
Hyperprolactinemia	Screening for symptoms of	Screening for symptoms of

	hyperprolactinemia. Prolactin level, if indicated on the basis of clinical history	hyperprolactinemia at each visit until stable, then yearly if treated with an antipsychotic known to increase prolactin. Prolactin level, if indicated on the basis of clinical history
Extrapyramidal side effects, including akathisia	Clinical assessment of extrapyramidal side effects	Clinical assessment of extrapyramidal side effects weekly during acute treatment until antipsychotic dose is stable for at least 2 weeks, then at each clinical visit during stable phase
Tardive dyskinesia	Clinical assessment of abnormal involuntary movements	Clinical assessment of abnormal involuntary movements every 6 months in patients taking first-generation antipsychotics and every 12 months in those taking second generation antipsychotics In patients at increased risk, assessment should be done every 3 months and every 6 months with treatment using first- and second-generation antipsychotics, respectively

Chart Note: Adapted from the American Psychiatric Association.<sup>2</sup>  
Please consult the guidelines for complete details.<sup>2</sup>

Subhead: Summary

Moderator: Since side effects are a crucial aspect of treatment, what instructions to patients may help them with adherence and communication with their physician?

Dr. Chue: “Mentioning the possibility of acute side effects helps patients to identify and report their occurrence and also may help maintain a therapeutic alliance. To the extent possible, it is important to minimize acute side effects of antipsychotic medications, such as dystonia, that can significantly influence a patient’s willingness to accept and continue pharmacological treatment.”<sup>2</sup>

According to the American Psychiatric Association patients should be assessed and monitored for specific side effects of treatment.<sup>2</sup>

Visuals to be shown at the end of the segments:

References:

1. American Psychiatric Association. *Diagnostic and statistical manual of mental disorders*. 4<sup>th</sup> ed. Washington, DC: American Psychiatric Association; 1994.
2. American Psychiatric Association. *Practice Guideline for the Treatment of Patients with Schizophrenia*. 2<sup>nd</sup> ed. Arlington, VA: American Psychiatric Association; 2004.
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**Interface Pages: Summary**

Page 1: Welcome  
Page 2: Legal Disclaimer  
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Page 5: Balancing Copy  
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## **Interface Pages:**

### **Interface Page 1:**

Headline: Welcome

Copy: We are pleased to provide you with the *Tolerability and Quetiapine* presentation. This presentation on the atypical antipsychotic quetiapine (Seroquel<sup>®</sup>) focuses on:

- Receptor binding
- Metabolic abnormalities
- Movement disorders
- Prolactin elevation and sexual dysfunction
- An overview on patient adherence and tolerability

We hope you find this presentation informative and the content valuable in assisting you in the care and management of patients with schizophrenia and bipolar-mania.

To proceed with the presentation please select your language of preference.

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### **Interface Page 2:**

Headline: Legal Disclaimer

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### Interface Page 3:

Headline: Contents

Copy (hyperlink): Evidence in Psychiatry: Receptor Binding - Dr. Phillip Seeman (Toronto, Ontario)  
Metabolic Abnormalities - Dr. David Lau (Calgary, Alberta)  
Movement Disorders - Dr. Richard Williams (Victoria, British Columbia)  
Prolactin Elevation and Sexual Dysfunction - Dr. Marie-Josée Filteau (Quebec City, Quebec)  
Patient Adherence and Tolerability - Dr. Pierre Chue (Edmonton, Alberta)

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of page (hyperlink): [View all sections](#)

### Interface Page 4:

Headline: Balancing Copy

Seroquel<sup>®</sup> is indicated for the management of the manifestations of schizophrenia. The antipsychotic efficacy of Seroquel<sup>®</sup> was established in short-term (6-week) controlled trials. The efficacy of Seroquel<sup>®</sup> in long-term use has not been evaluated in controlled clinical trials.

Seroquel<sup>®</sup> is indicated as monotherapy for the acute management of manic episodes associated with bipolar disorder. The efficacy of Seroquel<sup>®</sup> in bipolar disorder – mania was established in two 12-week clinical trials of bipolar patients. The safety and effectiveness of Seroquel<sup>®</sup> for long-term use, and for prophylactic use in bipolar disorder, has not been evaluated.

The most common adverse events occurring during Seroquel<sup>®</sup> monotherapy in schizophrenia (incidence of at least 5%, and an incidence of at least 5% higher than that observed with placebo) were: somnolence, dizziness, dry mouth, postural hypotension and elevated ALT (SGPT) levels.

The most common adverse events occurring during Seroquel<sup>®</sup> monotherapy in bipolar mania (incidence of at least 5%, and an incidence of at least 5% higher than that observed with placebo) were: somnolence, dry mouth, and weight gain. Please see Product Monograph before prescribing.

Eye examinations are recommended prior to, or shortly after initiation of treatment, and at 6 month intervals thereafter. Caution should be used in the elderly and those with known hepatic or renal impairment.

Source: Seroquel<sup>®</sup> Product Monograph, AstraZeneca Canada Inc. April, 2005.

## Interface Page 5:

Headline: Thank you

On behalf of AstraZeneca, thank you for taking the time to view *Tolerability and Quetiapine* presentation. We hope that you found this presentation on the atypical antipsychotic quetiapine (Seroquel<sup>®</sup>) informative and the content valuable in assisting you in the care and management of patients with schizophrenia and bipolar-mania.

Logos: AstraZeneca  
Seroquel<sup>®</sup>

Tagline: Treat Them Well

## Interface Page 6:

Headline: References:

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[Chapter 1]

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[Chapters 2-5]

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