Patient Information:

- **Patient ID:** 459203
- **Name:** Maria Russell
- **Date of Birth:** 07/14/1985
- **Gender:** Female
- **Contact:** (555) 987-6543
- **Address:** 5678 Oak Lane, Springfield, IL 62704

Medical History: Maria Russell, a 38-year-old female, presented to the clinic with a chief complaint of chronic lower back pain that has persisted for approximately six months. She reports that the pain is exacerbated by prolonged sitting and standing, and it occasionally radiates down her right leg. Maria has a history of asthma, which is well-controlled with an inhaled corticosteroid (Fluticasone 110 mcg) and a rescue inhaler (Albuterol). She also has a history of seasonal allergies, for which she takes Cetirizine 10 mg daily. Maria denies any history of hypertension, diabetes, or hyperlipidemia. She has no known allergies to medications, foods, or environmental factors.

Maria works as a software developer, a sedentary occupation that may contribute to her back pain. She exercises irregularly, primarily walking for about 20 minutes a few times a week. She does not smoke and drinks alcohol socially, about 2-3 glasses of wine per week. Maria lives with her husband and two children, ages 5 and 8.

Presenting Complaint: Maria reports that her lower back pain began insidiously and has progressively worsened over the past six months. The pain is described as a constant ache with intermittent sharp, shooting pains down her right leg. She rates the pain as 6/10 in severity, increasing to 8/10 during flare-ups. The pain is alleviated somewhat by over-the-counter NSAIDs, such as Ibuprofen 400 mg taken as needed, but it never fully resolves.

Physical Examination: On examination, Maria appeared well and in no acute distress. Her vital signs were stable with a blood pressure of 120/78 mmHg, heart rate of 72 beats per minute, respiratory rate of 16 breaths per minute, and temperature of 98.6°F.

The HEENT examination was unremarkable. Cardiorespiratory examination revealed clear breath sounds bilaterally, with no wheezes, rales, or rhonchi, and normal heart sounds without murmurs, gallops, or rubs. The abdominal examination was soft and non-tender with no organomegaly.

Musculoskeletal examination of the back revealed tenderness to palpation over the lower lumbar region. There was no evidence of muscle spasm. Range of motion was limited in flexion and extension due to pain. The straight leg raise test was positive on the right at 45 degrees, indicating possible nerve root irritation. Neurological examination showed normal strength and reflexes in the lower extremities, but there was decreased sensation to light touch over the lateral aspect of the right leg.

Laboratory and Imaging Results: Basic laboratory tests, including a complete blood count (CBC) and comprehensive metabolic panel (CMP), were within normal limits.

An MRI of the lumbar spine was ordered, revealing a herniated disc at the L4-L5 level with impingement on the right L5 nerve root.

Diagnosis:

- Primary: Lumbar disc herniation at L4-L5 with right L5 radiculopathy.
- Secondary: Well-controlled asthma and seasonal allergies.

Treatment Plan: Given the diagnosis of lumbar disc herniation with radiculopathy, a conservative treatment approach was recommended initially. Maria was referred to physical therapy for a structured exercise program aimed at strengthening the core and lower back muscles, improving flexibility, and reducing pain. She was also advised to continue taking NSAIDs as needed for pain relief and to apply heat or cold packs to the affected area.

Maria was instructed on proper ergonomics and posture, particularly in her workplace, to reduce strain on her lower back. A follow-up appointment was scheduled for six weeks to reassess her symptoms and progress with physical therapy. If her symptoms do not improve or worsen, consideration will be given to referral to a spine specialist for further evaluation, which may include epidural steroid injections or surgical consultation.

Maria's asthma management was reviewed, and she was advised to continue her current inhaled corticosteroid and rescue inhaler regimen. She was educated on recognizing asthma exacerbations and the importance of avoiding known triggers.

For her seasonal allergies, Maria was advised to continue taking Cetirizine daily and to consider using a saline nasal spray to help alleviate nasal congestion.

Follow-Up: At her six-week follow-up appointment, Maria reported significant improvement in her lower back pain and a reduction in the frequency and severity of her leg pain. She attributed much of her progress to the physical therapy exercises and ergonomic adjustments at her workstation. She reported that she was able to increase her physical activity level and felt more confident in managing her symptoms.

A repeat neurological examination showed no new deficits, and her straight leg raise test was negative. Maria was encouraged to continue her physical therapy program and follow up as needed. She was also advised to maintain regular exercise and a healthy lifestyle to prevent recurrence of her back pain.

Patient Education: Maria was educated on the importance of maintaining a healthy weight, engaging in regular physical activity, and practicing good posture and body mechanics to prevent future episodes of back pain. She was also reminded of the signs and symptoms of asthma exacerbation and the importance of adhering to her medication regimen and avoiding triggers.

Summary: Maria Russell, a 38-year-old female, presented with chronic lower back pain and right leg radiculopathy. An MRI confirmed a lumbar disc herniation at L4-L5 with right L5 nerve root impingement. Conservative management with physical therapy and NSAIDs was initiated, resulting in significant symptom improvement. Her asthma and seasonal allergies remain well-controlled with her current medication regimen. Follow-up care focuses on maintaining her progress and preventing recurrence of symptoms through ongoing physical therapy, ergonomic adjustments, and a healthy lifestyle.