

Patient Information:

- **Name:** Jane Smith
- **Age:** 45
- **Gender:** Female
- **Admission Date:** September 15, 2024
- **Discharge Date:** October 1, 2024
- **Attending Surgeon:** Dr. Emily Tran
- **Attending Physiatrist:** Dr. Aaron Lee

Previous Medical History:

- **Allergies:** Penicillin (rash).
- **Chronic Conditions:** Type 1 Diabetes, managed with insulin pump.
- **Previous Hospitalizations:** None related to orthopedic issues.
- **Family Medical History:** Mother with osteoporosis, father with a history of herniated discs.

Admission Details:

- **Reason for Admission:** Fell from a height while hiking, resulting in severe back pain and inability to move without significant pain.
- **Initial Assessment:** Emergency imaging revealed a compression fracture at the L1 vertebral level with potential nerve impingement.
- **Diagnostic Tests:** MRI confirmed the fracture and indicated no extensive soft tissue damage but potential for nerve compression. Neurological examination showed reduced sensation in the lower extremities without complete loss of function.

Surgical Intervention:

- **Procedure Name:** L1 Vertebroplasty
- **Date of Surgery:** September 17, 2024
- **Surgeon:** Dr. Emily Tran
- **Anesthesia:** General anesthesia administered without complications.

- **Procedure Details:** Minimally invasive procedure performed to stabilize the L1 vertebra. Bone cement was injected into the cracked vertebra to restore its shape and relieve pressure on the nerves.
- **Outcome:** Successful stabilization of the fracture, with immediate postoperative imaging showing proper placement of the cement and no leakage.

Hospital Course:

- **Postoperative Care:**
 - **Day 1-3 Post-Surgery:** Patient managed in the inpatient orthopedic recovery unit. Pain controlled with IV opioids initially, then transitioned to oral pain medication. Insulin levels monitored closely due to diabetes.
 - **Day 4-7:** Physical therapy initiated with gentle, non-weight bearing exercises to improve mobility and prevent muscle atrophy.
 - **Day 8-14:** Continued physical therapy with gradual increase in activities. Pain management shifted to non-opioid options such as acetaminophen and occasional ibuprofen.
 - **Day 15-16:** Preparation for discharge, including education on home care and follow-up.

Discharge Medications:

- **Acetaminophen 500 mg:** Take 1-2 tablets every 6 hours as needed for pain.
- **Calcium and Vitamin D Supplement:** One tablet daily to support bone health.
- **Stool Softener (Docusate Sodium):** 100 mg twice daily to prevent constipation from reduced mobility and pain medications.

Post-Discharge Care Plan:

Follow-Up Appointments:

- **Dr. Emily Tran (Surgeon):** Follow-up visit scheduled for October 15, 2024, to assess the surgical site and overall spine stability.
- **Dr. Aaron Lee (Physiatrist):** Bi-weekly follow-ups for the first two months to monitor rehabilitation progress and adjust physical therapy as needed.

Physical Therapy:

- **Initial Phase:** Continue with home-based physical therapy focusing on gentle stretching and strengthening exercises without bending or twisting the spine.

- **Progressive Phase:** Gradually incorporate light aerobic exercises such as walking or swimming as tolerated, aiming to increase flexibility and strength.

Lifestyle Modifications:

- **Activity Restrictions:** Avoid lifting weights over 10 pounds and refrain from high-impact activities for at least three months.
- **Dietary Considerations:** High-protein, high-calcium diet recommended to aid in bone healing and overall recovery. Monitor blood sugar levels closely due to diabetes and potential changes in activity level.

Home Setup:

- **Ergonomic Adjustments:** Ensure that the sleeping and sitting arrangements at home support spinal alignment. Use of a firm mattress and lumbar support when sitting.
- **Safety Measures:** Install grab bars in the bathroom and ensure that the home environment is free of tripping hazards to prevent falls.

Physician's Closing Remarks:

- **Dr. Emily Tran:** "Jane's surgery was successful, and initial recovery is proceeding as expected. Adhering to the prescribed rehabilitation plan and follow-up schedule is crucial for a full recovery. Immediate reporting of any unusual pain, changes in sensation in the legs, or issues with wound healing is essential."