PACIFIC NORTHWEST SPINE INSTITUTE

Advanced Spine Care & Pain Management Center
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Patient: Thompson, Harold J. **DOB:** 11/08/1946 (Age: 78)
MRN: 20251005-HTJ **Date of Encounter:** October 15, 2025
PCP: Dr. Eleanor Martinez **Insurance:** Medicare + Medigap Plan G
Consulting Physician: Dr. Michael Chen, MD - Interventional Spine **Referral Source:** Orthopedics (Dr. Sarah Kim)

CHIEF COMPLAINT

Progressive mid-thoracic back pain following slip and fall injury 10 weeks ago, now with increasing pain despite ongoing conservative treatment.

HISTORY OF PRESENT ILLNESS

Mr. Thompson is a 78-year-old gentleman with complex medical history who presents for evaluation of persistent and now worsening thoracic spine pain. Patient reports that approximately 10 weeks ago (early August 2025), he slipped on his deck stairs and landed on his back. He experienced immediate onset of sharp mid-back pain and was evaluated in an urgent care facility where thoracic spine X-rays demonstrated compression deformity at T11. He was prescribed tramadol and instructed to follow conservative management with his primary care physician.

Over the subsequent 8 weeks, patient attempted conservative treatment including oral analgesics (tramadol, then oxycodone, acetaminophen), activity modification, use of a thoracolumbar orthosis, and home-based exercises. Initially, his pain was rated at 5/10 and remained relatively stable with these interventions.

However, over the past 2 weeks, patient reports progressive worsening of his pain from 5/10 to now 7/10 on the numeric rating scale. He describes the pain as constant, sharp, localized to the T10-T11 region, exacerbated by any movement or position changes. The pain is now interfering significantly with his sleep (waking 4-5 times nightly), appetite (10 lb weight loss), and ability to perform activities of daily living. He is largely homebound and dependent on his wife for most care needs.

Patient denies any lower extremity weakness, numbness, or bowel/bladder dysfunction. No fevers, chills, or night sweats. He has not had any new falls or trauma.

PAST MEDICAL HISTORY

Significant for multiple comorbidities:

• Osteoporosis - diagnosed 2020 following hip DEXA showing T-score -2.9
• Atrial fibrillation - on chronic anticoagulation with warfarin
• Chronic kidney disease Stage 3 (baseline Cr 1.6-1.8, eGFR 38-42)

• History of cerebrovascular accident (left MCA stroke 2019, residual mild right hand weakness)
• Coronary artery disease s/p PCI with DES to LAD (2018)
• Type 2 diabetes mellitus
• Hypertension
• Hyperlipidemia
• Benign prostatic hyperplasia

SURGICAL HISTORY

Right inguinal hernia repair (2010), Coronary catheterization with stent placement (2018), Cataract surgery bilateral (2021, 2022)

MEDICATIONS

Medication	Dose	Frequency	Indication
Warfarin	5 mg	Daily (M-W-F), 7.5 mg (T-Th-Sa-Su)	Atrial fibrillation
Teriparatide (Forteo)	20 mcg	SC daily	Osteoporosis
Calcium carbonate + Vit D3	600mg/800 IU	BID	Osteoporosis
Metformin ER	1000 mg	BID	Type 2 DM
Metoprolol succinate	50 mg	Daily	Afib, HTN
Lisinopril	20 mg	Daily	HTN, CKD
Atorvastatin	40 mg	Daily	Hyperlipidemia
Aspirin	81 mg	Daily	CAD
Tamsulosin	0.4 mg	Daily HS	BPH
Oxycodone	5 mg	Q6H PRN (taking regularly)	Pain
Acetaminophen	650 mg	QID	Pain

ALLERGIES

Penicillin (rash), Sulfa drugs (hives)

SOCIAL HISTORY

Retired accountant. Lives with wife in single-story home. Non-smoker. Rare alcohol use. Has VNA services twice weekly for medication management and vital sign monitoring given complex medication regimen. Prior to injury, was independent with all ADLs and ambulated with single-point cane due to baseline mild right-sided weakness from prior stroke.

REVIEW OF SYSTEMS

Constitutional: 10 lb weight loss over 2 months, poor appetite, fatigue

Cardiovascular: No chest pain, denies palpitations (known Afib)

Respiratory: No SOB, cough

GI: Decreased appetite, no N/V, bowel function normal

GU: No dysuria, no urinary retention (chronic BPH symptoms stable)

Musculoskeletal: As per HPI, denies other joint pains

Neurological: Baseline mild R hand weakness stable, no new neuro symptoms, no LE weakness or numbness

Psychiatric: Reports frustration and low mood related to pain and functional limitation

PHYSICAL EXAMINATION

Vital Signs: BP 148/84 mmHg, HR 68 bpm (irregular), RR 16, T 98.1°F, SpO2 97% on RA, Wt 168 lbs (down from 178 lbs 2 months ago), Ht 5'10"

General: Elderly male appearing stated age, slightly uncomfortable appearing, moving cautiously

Cardiovascular: Irregularly irregular rhythm, no murmurs. Peripheral pulses 2+ and symmetric.

Respiratory: Clear to auscultation bilaterally, no wheezes/rales/rhonchi

Spine Examination:

- Inspection: Mild thoracic kyphosis, no obvious deformity
- Palpation: Significant point tenderness over T10-T11 spinous processes. No paraspinal muscle spasm.
- Range of motion: Limited in all planes (flexion, extension, lateral bending, rotation) secondary to pain
- No step-off appreciated

Neurological Examination:

- Mental status: Alert and oriented x 3, appropriate
- Cranial nerves: II-XII intact
- Motor: Upper extremities 5/5 throughout except R hand intrinsics 4/5 (baseline per patient). Lower extremities 5/5 hip flexors, quadriceps, hamstrings, ankle dorsiflexion and plantarflexion bilaterally.
- Sensory: Intact to light touch and pinprick in all dermatomes
- Reflexes: Biceps 2+, triceps 2+, brachioradialis 2+, patellar 2+, Achilles 1+ (symmetric). Babinski downgoing bilaterally.
- Gait: Ambulates with single-point cane, slow and cautious, antalgic
- No saddle anesthesia, rectal tone normal (per PCP note)

PAIN ASSESSMENT - NUMERIC RATING SCALE

Date	NRS Score	Context
08/05/2025	8/10	Initial injury - Urgent Care
08/12/2025	5/10	1 week post-injury - PCP visit
09/09/2025	5/10	5 weeks post-injury - PCP visit
09/30/2025	6/10	8 weeks post-injury - PCP visit, notes increasing
10/15/2025	7/10	Today's visit - worsening pain

⚠ **CLINICAL NOTE:** Pain trajectory shows initial improvement followed by worsening over past 2 weeks (from 5/10 stable to current 7/10) despite ongoing conservative management and appropriate analgesic therapy.

IMAGING STUDIES

Thoracic Spine X-Ray (08/05/2025) - Urgent Care:

Compression deformity T11 vertebral body. No acute displaced fracture. Recommendation for MRI if pain persists.

MRI Thoracic Spine Without Contrast (08/15/2025):

INDICATION: T11 compression fracture, assess acuity

TECHNIQUE: Sagittal T1, T2, STIR; Axial T2

FINDINGS:

- T11 vertebral body compression fracture with approximately 30% anterior height loss
- Bone marrow edema pattern present within T11 vertebral body on STIR sequences, consistent with acute fracture
- No retropulsion into spinal canal
- Spinal cord demonstrates normal signal intensity
- Mild multilevel degenerative changes

IMPRESSION: Acute compression fracture T11 with bone marrow edema

Tc-99m Bone Scan (10/12/2025):

INDICATION: Assess fracture activity in patient with worsening pain

FINDINGS: Increased radiotracer uptake at T11 vertebral body consistent with active/ongoing bone turnover and fracture activity. No other areas of abnormal uptake.

IMPRESSION: Persistent active fracture T11

Thoracic Spine X-Ray (10/15/2025) - Today:

Comparison to 08/05/2025:

Progression of T11 compression with now approximately 35% anterior height loss (previously 30%). Increasing kyphotic angulation at T10-T11 level.

LABORATORY DATA

Test	Result	Reference Range	Date
WBC	7.8	4.5-11.0 K/uL	10/15/2025
Hemoglobin	11.9	13.5-17.5 g/dL	10/15/2025
Platelet	198	150-400 K/uL	10/15/2025
INR	2.8	2.0-3.0 (therapeutic for Afib)	10/15/2025
Creatinine	1.7	0.7-1.3 mg/dL	10/15/2025
eGFR	39	>60 mL/min/1.73m²	10/15/2025
Calcium	9.3	8.5-10.5 mg/dL	09/15/2025

25-OH Vitamin D	42	30-100 ng/mL	09/15/2025
HbA1c	7.2%	<7.0%	09/15/2025

DEXA SCAN RESULTS

Date: March 12, 2024
L1-L4 Spine: T-score -2.8 (Osteoporosis)
Left Femoral Neck: T-score -2.4 (Osteopenia)
Total Hip: T-score -2.7 (Osteoporosis)

CONSERVATIVE TREATMENT SUMMARY (Past 10 Weeks)

Pharmacologic Management:
• Weeks 1-3: Tramadol 50mg TID, Acetaminophen 650mg QID
• Weeks 4-10: Oxycodone 5mg Q6H, Acetaminophen 650mg QID (current regimen)
• Continuation of teriparatide (anabolic osteoporosis therapy) throughout

Non-Pharmacologic Management:
• Thoracolumbar orthosis (TLSO brace) - worn daily for support
• Activity modification - limited weight-bearing activities
• Home-based gentle stretching exercises (patient reports limited compliance due to pain)
• Physical therapy evaluation scheduled but patient unable to attend due to pain severity and transportation challenges

Osteoporosis Management:
• Currently on teriparatide (Forteo) - initiated 01/2024 by endocrinology
• Calcium and vitamin D supplementation optimized
• Regular follow-up with endocrinology (Dr. Rebecca Foster)
• Fall prevention assessment completed by VNA
• Patient educated on bone health, nutrition, weight-bearing exercise (as tolerated)

FUNCTIONAL ASSESSMENT

Oswestry Disability Index (ODI): 68% (Severe disability)
Roland Morris Disability Questionnaire: Not formally completed due to thoracic focus vs lumbar

Activities of Daily Living Impact:
Patient reports severe functional impairment:
• Unable to dress upper body without assistance
• Requires assistance with bathing
• Cannot prepare meals standing at counter
• Sleep significantly disrupted (waking 4-5 times nightly due to pain)
• Previously independent, now requires wife's assistance for most activities
• Homebound - has not left house in 2 weeks except for medical appointments

ASSESSMENT

Primary Diagnosis:

1. Subacute (10 weeks) osteoporotic compression fracture of T11 vertebral body with worsening pain trajectory and radiographic progression despite optimal conservative management

Comorbidities:

2. Osteoporosis, on anabolic therapy
3. Atrial fibrillation on therapeutic anticoagulation (warfarin)
4. Chronic kidney disease Stage 3
5. History of cerebrovascular accident with residual deficits
6. Coronary artery disease status post stenting
7. Type 2 diabetes mellitus
8. Hypertension
9. Hyperlipidemia

PHYSICIAN ASSESSMENT AND RECOMMENDATION

Mr. Thompson is a medically complex 78-year-old gentleman presenting with a subacute (10-week) osteoporotic compression fracture of T11. Advanced imaging confirms the fracture with bone marrow edema on initial MRI and persistent uptake on recent bone scan, documenting ongoing fracture activity. Notably, serial imaging demonstrates progression of vertebral height loss from 30% to 35%.

The patient's pain trajectory is concerning. After initial improvement with conservative measures (pain decreased from 8/10 to 5/10 by week 5), he has experienced worsening pain over the past 2 weeks, now rating his pain at 7/10 despite scheduled opioid analgesics. This represents a clear pattern of worsening pain despite ongoing optimal medical management.

His functional status has deteriorated significantly, with severe impact on activities of daily living and complete loss of independence. Weight loss of 10 pounds and sleep disruption indicate the systemic impact of his pain syndrome.

The patient has significant medical comorbidities requiring careful perioperative management. His therapeutic anticoagulation for atrial fibrillation will need to be held temporarily with appropriate bridging strategy (likely heparin bridging given high stroke risk with CHADS2-VASc score of 5). Chronic kidney disease will necessitate contrast precautions and careful monitoring. His prior CVA and CAD are stable but increase perioperative risk.

I have had extensive discussion with Mr. Thompson and his wife regarding treatment options. Given the worsening pain despite 10 weeks of conservative management, radiographic progression, ongoing fracture activity, and severe functional impairment, I recommend percutaneous vertebroplasty of T11 as the next appropriate step.

We have thoroughly reviewed the risks of the procedure including cement extravasation, infection, bleeding (particularly given anticoagulation), worsening pain, new fractures, and rare neurological complications. The need for temporary cessation of anticoagulation with associated stroke risk was emphasized. The patient and his wife understand these risks and wish to proceed given his current quality of life and functional status.

Cardiology and nephrology have been consulted and have provided clearance with recommendations for anticoagulation management and renal-protective measures. Endocrinology will continue comprehensive osteoporosis management.

PLAN

1. **Pre-authorization request for percutaneous vertebroplasty at T11**

2. Anticoagulation management per cardiology:
   - Hold warfarin 5 days pre-procedure
   - Bridge with enoxaparin given CHADS2-VASc = 5

- Resume warfarin evening of procedure day
- Continue enoxaparin until INR therapeutic

3. Renal protective protocol per nephrology:
- Minimize or avoid contrast if possible
- IV hydration pre/post procedure
- Monitor creatinine

4. Continue current pain management regimen pending procedure

5. Continue teriparatide and calcium/vitamin D supplementation

6. Follow-up with endocrinology for continued osteoporosis management

7. Fall prevention strategies - discussed with patient and VNA

8. Post-procedure plan includes mobilization with PT and reassessment of pain and function

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Electronically Signed:
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Date/Time: October 15, 2025 at 16:42 PST