Ms. Vravis was facing forward, restrained by her seatbelt, and did not anticipate the crash. Her body was thrown around and she immediately felt pain in her lower back after the [two] impacts. (She recalled her husband, Thomas Vravis, (the driver) stated that his head hurt immediately after the collision, but she did not recall either of them losing consciousness). Ms. Vravis declined medical evaluation, and on leaving the crash scene headed to the office where she (they both) remained for a couple of hours. After leaving the office, she went home.

On May 24, 2019, 3 days after the. Crash, Ms. Vravis presented to Dr. Jeffry Rocker (family medicine) with complaints of worsening pain and stiffness in her lower back (refer to prior history). Dr. Rocker diagnosed cervical, thoracic, and lumbar spine strain, ordered full-spine X-rays, and recommended follow up as needed.

On June 5, 2019, Ms. Vravis presented to Dr. Hannah Huerta (chiropractic) with complaints of pain in her neck and lower back. Dr. Huerta ordered MRIs of the cervical and lumbar spine and initiated treatment modalities. Ms. Vravis attended through July 26, 2019.

On June 18, 2019, Ms. Vravis presented to Judith Plummer-Morgan NP to Dr. Andrew Messer (orthopedic surgery) with severe and constant pain in her neck and lower back. She was diagnosed with cervical radiculopathy, cervicalgia, thoracic spine pain, low back pain, muscle weakness and recommended to continue with conservative care.

On June 24, 2019, Ms. Vravis underwent MRIs of the cervical and lumbar spine. The cervical spine study revealed: at C3-4, disk bulging with mild osteophytes resulting in anterior impression on the thecal sac; at C4-5, disk bulging with disk and uncovertebral osteophytes, mild spinal canal stenosis (1 cm) and moderate bilateral neuroforaminal stenosis; at C5-6 and 6-7, evidence of prior fusion surgery; at C7-T1, posterior disk herniation (appearing acute) resulting in mild spinal canal stenosis (1 cm), worse on the right and resulting in moderate right neuroforaminal stenosis; at T1-2, disk bulging resulting in anterior impression on the thecal sac; disk herniations at T2-3 and 3-4 (appearing acute and superimposed on pre-existing disk degeneration).

The lumbar spine study revealed: at L1-2, circumferential disk bulge with disk and facet osteophytes, anterior impression on the thecal sac and mild stenosis of the bilateral neural foramina; at L2-3, posterior disk herniation (appearing acute), disk bulging and osteophytes and resulting in mild spinal canal stenosis (0.9 cm), moderate stenosis of the right neural foramen and severe stenosis of the left neural foramen; at L3-4, broad based disk herniation (appearing acute) superimposed on disk bulging with disk and facet osteophytes, resulting in moderate spinal canal stenosis (0.8 cm) and severe bilateral neural foraminal stenosis possibly impinging on the left exiting L3 nerve roots; at L4-5, and L5-S1, evidence of prior fusion surgery (residual disks demonstrate bulging resulting in anterior impression on the thecal sac and mild bilateral neural foraminal stenosis;

On July 10, 2019, Ms. Vravis underwent an MRI of the thoracic spine which revealed: at T2-3, posterior disk herniation superimposed on disk bulging with anterior osteophytes resulting in mild spinal canal stenosis (1 cm) and mild stenosis of the bilateral neural foramina; at T3-4, posterior disk herniation superimposed on disk bulging with disk and facet osteophytes, resulting in mild stenosis of the spinal canal (0.8 cm) and moderate bilateral neuroforaminal stenosis; at T8-9, 9-10 and 10-11, anterior disk bulging due to anterior osteophytes; dextroconvex scoliosis centered at T7 (ten degrees).

On October 17, 2019, Ms. Vravis presented to Dr. Eli Prowe (chiropractic) with upper and lower back pain. She commenced therapeutic modalities and underwent treatment through October 22, 2020.

On October 28, 2019, Ms. Vravis presented to Catherine Hurley NP to discuss treatment options for pain management. She complained of pain radiating from the lower back to both hips and non-radiating neck pain. Ms. Hurley recommended cervical and lumbar epidural injections with persistent pain.

On November 13, 2019, Ms. Vravis presented to Dr. Ronald Stern (interventional pain management) with low back pain radiating into both hips, worse on the right for which, he performed a sacral hiatus caudal epidural block, providing 60% relief.

On February 4, 2020, Ms. Vravis presented to Dr. Timothy Bundy (physical medicine and rehabilitation). He discussed continuing therapy, as needed, interventional pain management to include lumbar caudal epidural steroid injections (2-3 times a year), Lumbar MRIs every 1-2 years (cervical every 5 years), and ongoing orthopedic evaluation as directed by Dr. Messer.

On May 21, 2020, Dr. Messer recommended obtaining a lumbar CT prior to determining further treatment options.

On May 29, 2020, Ms. Vravis underwent the lumbar CT which revealed: vascular calcification of the aorta and its major branch vessels; at L2-3, diffuse disk bulge indenting the ventral thecal sac and elevating the posterior longitudinal ligament with mild to moderate bilateral neural foraminal narrowing; at L3-4, diffuse disk bulge indenting the ventral thecal sac and elevating the posterior longitudinal ligament, severe bilateral neural foraminal narrowing, narrowing of the lateral recesses bilaterally with mild spinal stenosis to 1 cm; at L4-5, bilateral pedicle screws with interconnecting rod at L4-5-S1, status post bilateral laminectomy at L4-5; at L5-S1 mild to moderate right and mild neural foraminal narrowing.

On June 4, 2020, Dr. Messer reviewed the lumbar CT and recommended proceeding with a left L3-4 lumbar fusion.

**On July 1, 2020, Dr. Messer performed a direct lateral interbody fusion at L3-4 with discectomy and reconstitution of disk height, and correction of central disk herniation via left flank retroperitoneal approach., anterior stabilization with instrumentation at L3-4 using a lateral plate.**

Surgery provided around 70% symptom relief.

On September 7, 2020, Ms. Vravis presented to Dr. Christopher Pell (chiropractic). She commenced treatment modalities to strengthen the lower back, and attended therapy regularly through July 27, 2022, with subsequent intermittent treatment through October 24, 2023.

On May 3, 2021, Ms. Vravis underwent a telemed post-surgical evaluation with Dr. Messer. She reported constant right-sided gluteal pain. Dr. Messer ordered a further lumbar CT to evaluate the L3-4 fusion and right foraminal stenosis.

On May 6, 2021, Ms. Vravis updated the lumbar spine CT which revealed: mild levoscoliosis with apex to the left at L3-4; evidence of prior surgery at L4-5 and L5-S1 (severe vascular calcification of the aorta and its major branch vessels with suspected stenosis of the bilateral common iliac arteries-CT angiography recommended); at L1-2, disk bulging indenting the ventral thecal sac and elevating the posterior longitudinal ligament; at L2-3, a left paracentral/neural foraminal disk herniation indenting the ventral thecal sac and elevating the posterior longitudinal ligament superimposed on disk bulging with moderate bilateral neural foraminal narrowing; post bilateral laminectomy at L4 and L5.

On May 24, 2021, Dr. Messer recommended undergoing a right sacroiliac joint injection (for pain possibly caused by the pedicle screw/hardware).

On May 28, 2021, Dr. Rocker performed trigger point injections in the left paraspinal muscles between L4-5.

On November 17, 2021, Ms. Vravis underwent a right sacroiliac joint injection performed by Dr. Sidney Swartz, (anesthesiology) providing 80% improvement for one week, then tolerable pain for 4 months.

[In February 2022, Ms. Vravis underwent an exploratory laparotomy: CTA abdomen and pelvis revealed an acute hemorrhage from the anterior distal right common femoral artery, causing a large volume right retroperitoneal hematoma].

On April 5, 2022, Dr. Swartz performed right sacroiliac joint (as well as Dorsal Ramus over S1-2 and S2-3 lateral foraminal area) radiofrequency nerve ablations, providing 95% relief for 2-3 months.

On October 13, 2022, Dr. Swart performed a further caudal lumbar epidural steroid injection., providing 100% relief for 4-6 weeks. Dr. Swartz also discussed orthopedic evaluation to discuss revision of the L3-4 lumbar discectomy and fusion.

On January 10, 2023, Ms. Vravis presented to Dr. Ryan DenHaese (neurosurgery) with persistent pain in her lower back, right hip, and buttock. On examination she demonstrated pain with compression test, thigh thrust and Faber testing on the right and pain with palpation of the right sacroiliac (SI) joint. He discussed findings from lumbar spine imaging obtained January 6, 2023, and December 22, 2022, which revealed a solid posterior lateral arthrodesis from L4-S1 with screws in position, air in the disk at L2-3 with vacuum disk phenomena; and interval worsening of a right paracentral disk at L2-3 resulting in moderate to severe right lateral recess stenosis. Dr. DenHaese recommended proceeding with a right SI joint fusion to treat the SI joint dysfunction, and to treat the L2-3 disk conservatively.

On June 30, 2023, Ms. Vravis presented to Shawn Nixon NP to Dr. Denhaese to discuss treatment options. Mr. Nixon discussed lumbar epidural steroid injections to treat persistent right lumbar radicular symptomatology.

**On December 14, 2023, Ms. Vravis underwent a right sacroiliac joint fusion, performed by Dr. Ryan DenHaese (neurosurgery).** Height: 5 ft 10 inches**,** weight: 130 lbs.

*Pre-crash medical history*

Ms. Vravis underwent an anterior cervical discectomy and fusion (ACDF), at C5-6 and 6-7, performed Dr. Paul Sawin, (neurosurgery) on July 6, 2004, due to chronic spondylosis with biforaminal stenosis at C5-7.

On August 18, 2009, she underwent a lumbar spine posterior decompression and fusion at L4-5 and L5-S1 due to left lumbar radiculopathy.

She took Tizanidine 4 mg, prescribed by Dr. Jeffry Rocker (family medicine) for mild residual muscle aches in her lower back. She was also prescribed Gabapentin 300 mg.

Ms. Vravis underwent right knee arthroscopic surgery with partial lateral meniscectomy, chondroplasty patellofemoral joint for grade III chondrosis patellofemoral joint and complex tear of the lateral meniscus, performed by Dr. Richard Konsens (orthopedic surgery) on February 23, 2012.

*Prior MRIs/imaging*

MRI cervical spine, December 11, 2003, revealed: at C5-6, intervertebral disk narrowing, extensive degenerative disk bulging and osteophytic spurring with bilateral moderate to severe foraminal stenosis, bilateral but more pronounced on the left with flattening of the spinal cord; at C6-7, degenerative disk bulge with a superimposed central and bilateral paracentral 2-3 mm disk protrusion; at C4-5, intervertebral disk narrowing and moderate left foraminal stenosis from uncinate spurring.

Lumbar spine X-rays obtained September 24, 2009, revealed: posterior fusion with posterior decompression from L4 through S1 with intact hardware; intervertebral disk spacer at L4-5 and L5-S1 with bone chip placed along the lateral masses bilaterally, and minimal spondylosis at L3-4.

Lumbar spine MRI also obtained in 2009 revealed: disk degeneration at L4-5 and L5-S1 with desiccation, broad-based disk bulging with some protrusion and small amount of extrusion/herniation laterally on the left at both levels.

*Medical and other records reviewed for history*

Barbara Vravis deposition July 28, 2021

Simon Med

Florida Hospital Radiology (prior)

Orlando Neurosurgery, Dr. Sawin (prior)

Jewett Orthopedic (prior)

Physician’s Surgical Care Center, operative report (prior)

Ocala Regional Medical Center

Care First Imaging

SimonMed Imaging

Ocala Chiropractic, Dr. Pell

Maitland Surgery Center

Integrative Physical Medicine of Ocala, Dr. Prowe

Interventional Associates of Leesburg, Dr. Messer