OCCUPATIONAL MEDICINE ASSOCIATES OF CHICAGO, LTD.
22 NORTH MORGAN, SUITE 110
CHICAGO, ILLINOIS 60607

Telephone (312) 733-6622
Fax (312) 733-8606

JEFFREY COE, M.D., PH.D.
Board Certified Occupational Medicine
Medical Director, Occupational Medicine Associates of Chicago

Mr. Edward X. Clinton, Jr.
Attorney at Law
The Clinton Law Firm
111 West Washington
Suite 1437
Chicago, IL 60602

December 6, 2018

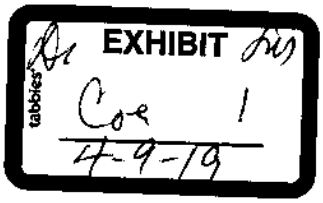
RE: Cheryl D. Reichenbach
Case #: 2016 L 004779

Dear Mr. Clinton:

At your request, I evaluated your client, Ms. Cheryl Reichenbach, at my office on December 6, 2018. I also reviewed a number of Ms. Reichenbach's treatment medical records and other materials relating to her care following an accident on June 18, 2004. The materials reviewed are of a type customarily relied upon by physicians.

HISTORY:

According to treatment medical records and a history taken from this patient, Ms. Reichenbach had no significant back pain or limitation prior to an accident on June 18, 2004. Prior to this date, Ms. Reichenbach stated that she was fully active in home care, childcare and recreational activities (including rollerblading, horseback riding, workout exercising, water skiing and playing with her three children). Ms. Reichenbach stated that she had no specific medical diagnosis, treatment or advanced diagnostic imaging for her lumbar spine prior to June 18, 2004.



On June 18, 2004, Ms. Reichenbach was on vacation with her family in Hawaii, when she suffered an injury to her back on a guided tour, jumping from a ledge into a mountain pool in Maui. Ms. Reichenbach stated that she noted immediate, severe pain in her lower back unlike "any other pain" she had ever experienced. Ms. Reichenbach was ultimately taken, with some difficulty, back to her hotel. Ms. Reichenbach rested at her hotel, taking over-the-counter analgesic medication. Her severe, "excruciating" back pain persisted as did limitation in motion due to pain.

On June 20, 2014, Ms. Reichenbach was examined at the Doctors on Call Clinic in Maui by Dr. Schnyder. The history of her accident was noted and she was given prescription medication (analgesic and muscle relaxant) for pain control. X-rays of her lumbar spine were not performed at that time. She was advised to rest and to follow-up if pain persisted.

Ms. Reichenbach stated that medications prescribed by Dr. Schnyder led to only limited improvement. She was able to return to Illinois, flying with difficulty due to pain. Upon her return, Ms. Reichenbach sought treatment from her family physician, Dr. Veselik. Ms. Reichenbach was examined by Dr. Veselik on June 24, 2004. X-rays were not taken on that date and Ms. Reichenbach sought treatment from an orthopaedic specialist.

Ms. Reichenbach was referred to a spinal orthopaedic specialist, Dr. Shapiro, and examined on June 25, 2004. Dr. Shapiro reviewed Ms. Reichenbach's history of the accident while on vacation on June 18, 2004, as described above with the onset of acute, severe localized lower back pain (no leg radiation at that time) as well as some mid and upper back pain. At this visit, Ms. Reichenbach also complained of occasional lower extremity and foot numbness and tingling. Dr. Shapiro recorded that Ms. Reichenbach had no past medical history of significant lower back pain. Dr. Shapiro's examination found Ms. Reichenbach to be in pain with a slow gait, decreased range of motion of the cervical and lumbar spine, "significant ecchymoses" of both buttocks and a somewhat depressed bilateral triceps reflex.

Imaging of Ms. Reichenbach's spine was now performed (one week post accident). X-rays of Ms. Reichenbach's lumbar spine were interpreted as showing an L1 compression fracture with 25 percent disc height loss and L3-L4 scoliosis with focal kyphosis and severe narrowing at L3-L4. Wedging and narrowing was also described at L4-L5. X-rays of Ms. Reichenbach's cervical spine were interpreted as showing disc space narrowing in the mid to lower cervical region without instability on flexion/extension. Based on examination and diagnostic testing, Dr. Shapiro diagnosed a "burst fracture" of the L1 vertebra, possible fracture/dislocation at L3-L4, and neck pain. Dr. Shapiro concluded that Ms. Reichenbach's "high velocity fall" into the water had caused the L1 fracture. For further evaluation, Dr. Shapiro prescribed a lumbar MRI scan, adding that as Ms. Reichenbach also complained of neck and upper back pain, the MRI should include the "entire spine."

The prescribed spinal MRI scans were performed on June 27, 2004, at Highland Park Hospital MRI Center. The indication for these tests was stated to be "lumbago" with dorsal back pain. Ms. Reichenbach's lumbar MRI scan was interpreted as showing an acute compression fracture of the L1 vertebra with retropulsed bone at the superior aspect of the vertebra causing mild left lateral recess stenosis. At L3-L4, disc degeneration was described with right-sided herniation and facet degeneration causing moderate to severe bilateral neuroforaminal stenosis (right side greater than left). The thoracic MRI was interpreted as showing some degeneration and disc bulging at T11-T12 (above the fracture site). Ms. Reichenbach's cervical MRI was interpreted as showing disc bulges and small herniations at C3-C6, with some mild right neuroforaminal stenosis at C4-C5, and bilateral stenosis at C5-C6.

In view of the lumbar MRI findings and evident fracture of the L1 vertebra, a CT scan of the lumbar spine was performed that was also interpreted as showing an acute compression fracture of the L1 vertebra with retropulsed bone. In addition, a small left-sided disc herniation was described at L5-S1, causing mild left neuroforaminal stenosis.

Dr. Shapiro reexamined Ms. Reichenbach and reviewed the diagnostic tests on June 30, 2004. Dr. Shapiro interpreted the tests as showing an L1 burst fracture with approximately 20 percent loss of the spinal canal diameter in vertebral height. Dr. Shapiro diagnosed and L1 burst fracture with retropulsion and degenerative disc disease at L3-L4. Treatment options were discussed and Dr. Shapiro prescribed medication and observation as well as follow-up in six weeks. Dr. Shapiro did not address spinal immobilization.

In a summary note of the visit of June 30, 2004, Dr. Shapiro stated two specific lumbar diagnoses: (1) Burst fracture L1 without significant central canal stenosis; and (2) Mild to moderate spinal stenosis in the lower lumbar spine that, in Dr. Shapiro's opinion, was not causing Ms. Reichenbach's current symptoms.

Ms. Reichenbach stated that she was unable to continue in the care of Dr. Shapiro due to travel/distance issues. She contacted her family physician and was referred to a spinal orthopaedic specialist, Dr. Rinella, at Loyola University Medical Center.

Dr. Rinella examined Ms. Reichenbach on July 1, 2004. Dr. Rinella recorded Ms. Reichenbach's history of injury on June 18, 2004, and subsequent treatment. Following examination, x-rays were taken of Ms. Reichenbach's lumbar spine. Dr. Rinella interpreted the x-rays on that date as showing a severe superior endplate fracture of the L1 vertebra (compression or burst fracture) with a now 50 percent loss of anterior body height and slight posterior wall protrusion (retropulsion). In view of the apparent progression of collapse at L1, Dr. Rinella prescribed lumbar immobilization with a TLSO (rigid) spinal brace. Dr. Rinella also prescribed a 10-pound lifting limitation with avoidance of any bending or twisting until further follow-up and repeat diagnostic testing (to determine the stability of the fracture site).

Ms. Reichenbach stated that she continued in her convalescence at home, assisted by family members in home care and driving.

Lumbar spine x-rays were repeated at Loyola University Medical Center on July 16, 2004. According to records reviewed, the x-rays were interpreted as showing no further collapse in the wedge deformity of the L1 vertebra, mild endplate degenerative disease at L3-L4, with disc space narrowing and scoliosis, convex to the right in the upper lumbar region. Dr. Rinella reviewed the x-rays and prescribed ongoing lumbar immobilization.

On August 5, 2004, Dr. Rinella again examined Ms. Reichenbach, noting little symptom change. X-rays were repeated on this date that were again interpreted as showing findings of the L1 compression fracture. Dr. Rinella interpreted the x-rays as showing no change from the study of July 16, 2004. Additional follow-up was again prescribed.

On September 2, 2004, Dr. Rinella's reexamination again found little symptomatic change. X-rays repeated on this date found no change in the L1 fracture position or orientation, although Dr. Rinella described significant focal kyphosis surrounding the fracture site. Dr. Rinella now prescribed a trial of controlled physical therapy. Physical therapy was begun on September 14, 2004.

Dr. Shapiro reexamined Ms. Reichenbach on January 5, 2005. Dr. Shapiro noted that this examination was approximately 5-1/2 months following the accident of June 18, 2004, with acute L1 compression fracture. Dr. Shapiro found some slow, steady improvement, although Ms. Reichenbach continued to complain of back pain occasionally radiating into her right leg with some foot numbness. Dr. Shapiro's examination found excellent flexibility of the spine. X-rays were taken that Dr. Shapiro interpreted as showing no change in the previously described L1 compression fracture morphology. Dr. Shapiro diagnosed: (1) burst fracture of the L1 vertebra that had stabilized; and (2) thoracolumbar scoliosis that was stable. Dr. Shapiro noted that Ms. Reichenbach had also been treated by Dr. Rinella, who had prescribed conservative (nonoperative) management. Dr. Shapiro concurred and recommended additional physical therapy.

Ms. Reichenbach was seen for further follow-up by Dr. Rinella. Reexamination on January 18, 2005, found continued lower back pain causing difficulty in sleeping and moving (for example, rolling over in bed) as well as pain in the right hip region made worse by hip flexion. Dr. Rinella's physical examination found slight kyphosis at the thoracolumbar junction with otherwise preserved range of motion. Slight decrease in sensation was found in both lower extremities, although Ms. Reichenbach was otherwise neurologically intact. X-rays of Ms. Reichenbach's spine were repeated that were interpreted as showing the compression fracture and no change in the "regional kyphosis" surrounding the now "healed L1 fracture." Dr. Rinella measured the kyphosis as at 27 degrees. Dr. Rinella diagnosed: (1) a healed L1 compression fracture; and (2) lumbar scoliosis with significant degenerative spondylosis at L3-L5. Dr. Rinella's records include the radiologist's report of x-rays of this date that assessed the L1 compression fracture as at a measured 50 percent vertebral body height loss. Dr. Rinella discussed treatment options, prescribing continued home exercises. With regard to prognosis, Dr. Rinella discussed the possibility of a repeat CT scan as it was his "sense" that she may be symptomatic from progression of her lumbar curvature, although overall size of the curve remained rather small "at that time." Dr. Rinella prescribed follow-up in two months.

Ms. Reichenbach stated that she continued in the care of Dr. Rinella. A repeat lumbar MRI was performed on April 21, 2005, and again interpreted as showing the L1 compression fracture as well as marked degenerative change at L3-L4 (disc bulging and osteophyte formation now causing severe spinal stenosis) and disc bulging at L4-L5, as well as slight disc displacement at L5-S1. Dr. Rinella diagnosed scoliosis, degenerative change and spinal stenosis.

On October 7, 2005, Ms. Reichenbach underwent a bone density scan. The bone density scan was interpreted as showing only some osteopenia (no osteoporosis).

Repeat thoracolumbar spine x-rays were performed at Dr. Rinella's prescription on October 25, 2005. These x-rays were again interpreted as showing a compression fracture of the L1 vertebra with 50 percent vertebral height loss, unchanged from prior x-rays (most recently January 18, 2005).

Ms. Reichenbach stated that she continued in the care of Dr. Rinella. She stated that the pain and stiffness in her back persisted. She attempted to carry out home activities as tolerated.

On July 24, 2006, at Dr. Rinella's prescription, a repeat lumbar MRI scan was performed. The MRI was interpreted as showing the compression deformity of the L1 vertebra with multilevel disc and facet joint change, unchanged from the prior MRI scan of April 21, 2005.

Dr. Rinella reexamined Ms. Reichenbach on January 31, 2007. On that date, Dr. Rinella recorded that Ms. Reichenbach continued to experience significant lower back pain (occasionally to 8/10 in severity) with some back pain present every day, limiting Ms. Reichenbach's mobility and causing difficulty in sleeping, playing with her children and other family activities. Dr. Rinella's clinical examination found mid lumbar spine tenderness (left side greater than right) with lumbar stiffness. At this visit, Dr. Rinella diagnosed "adult scoliosis." With regard to this diagnosis as well as the healed L1 compression fracture, Dr. Rinella "encouraged" Ms. Reichenbach to remain as active as possible. Dr. Rinella found no clear evidence of progression of the scoliosis at this visit, but also observed that, within the areas of scoliosis curvature, Ms. Reichenbach already showed focal areas of severe degeneration that might contribute to her "overall clinical scenario." Dr. Rinella discussed treatment options including lumbar surgery for scoliosis correction and prevention of further progression. In view of the extensive nature of the surgery (see below), Ms. Reichenbach was advised to carry out home activities and maintain physical fitness as well as muscle tone in an attempt to avoid the need for surgery. Additional follow-up with Dr. Rinella was prescribed.

Ms. Reichenbach continued in the care of Dr. Rinella with follow-up visits. On December 6, 2007, thoracolumbar x-rays were repeated. The indication for the x-rays was stated to be "scoliosis." The x-rays were interpreted as showing the L1 vertebral fracture with 50 percent height loss associated with mild focal kyphosis (forward bending) and continued mild to moderately severe right lumbar scoliosis (curvature) without further deterioration as compared to x-rays of September, 2006. Additional degenerative change was also described at L3-L4, "contributing to the curvature."

Ms. Reichenbach stated that she continued in the care of Dr. Rinella with scheduled follow-up visits. She stated that the pain and stiffness in her back persisted, limiting daily activities.

In view of the multiple spinal anatomic abnormalities and deformities, a repeat bone density scan was performed on November 20, 2008. The scan was again interpreted as showing osteopenia (without osteoporosis).

Ms. Reichenbach sought treatment from a chiropractor at Healthy Connection Chiropractic & Rehabilitation Clinic in Lockport, Illinois, with chiropractic therapy beginning on May 1, 2009. According to chiropractic assessment, Ms. Reichenbach complained of pain and scoliosis in her back that now had been present for approximately five years with some lower extremity radicular symptoms. She reported that she had difficulty in sitting and standing for "long periods of time" and was unable to "do anything athletic" due to back pain and stiffness. Chiropractic adjustment, manipulation and other therapies were carried out.

On May 14, 2009, thoracolumbar x-rays were repeated at Dr. Rinella's prescription. These x-rays were again interpreted as showing thoracolumbar rotoscoliosis with degenerative change at L3-L4.

Dr. Rinella reviewed the thoracolumbar x-rays. A repeat lumbar MRI scan was prescribed and performed on July 20, 2009. The indication for the scan was stated to be ongoing symptoms including leg pain. The MRI of July 20, 2009, was interpreted as showing marked scoliosis with slight progression in the L1 vertebral collapse and severe endplate degenerative change at L2-L4, as compared to the MRI scan of April, 2005.

Ms. Reichenbach stated that her back symptoms persisted. She stated that she was unable to continue in the care of Dr. Rinella due to insurance coverage issues. She was seen for back pain treatment by her family physician, Dr. Veselik.

On March 4, 2010, Dr. Veselik examined Ms. Reichenbach, noting her complaints of multiple areas of aching pain in her back and that this back pain was "not new," as Ms. Reichenbach had been dealing with it for "some time now." Dr. Veselik also stated that Ms. Reichenbach had a known history of scoliosis with back injury a few years earlier and that chiropractic adjustment and manipulation had been unhelpful. Following examination, Dr. Veselik prescribed anti-inflammatory medication on an as needed basis as well as water exercises.

Ms. Reichenbach continued in the care of Dr. Veselik. Repeat diagnostic testing was performed in 2011, including an MRI scan of May 12, 2011. The MRI was interpreted as showing a chronic L1 compression deformity (now healed and unchanged from prior studies), multilevel degenerative change in the lumbar spine "most advanced" at L2-L3 (spinal level immediately below the compression fracture site) with mild left neuroforaminal narrowing at that level. At L3-L4 and L4-L5, disc bulging and facet degenerative change was found causing some stenosis. Additional. Dr. Veselik prescribed additional medication and home exercises.

Ms. Reichenbach stated that she contacted Dr. Rinella, but was unable to continue in the specialist's care due to insurance issues. She stated that Dr. Rinella advised follow-up on an as needed basis and also discussed with her the nature of lumbar surgery for scoliosis stabilization. She stated that she was advised by Dr. Rinella to remain active and continue in a home exercise program.

At present, Ms. Reichenbach stated that she was no longer followed by specialist physicians for her back due to insurance issues. Again, as noted above, she had been advised to continue in the care of Dr. Rinella with follow-up visits on an as needed basis. She stated that she took some analgesic medication, on occasion, for control of back pain. She continued to perform daily exercises for core strengthening and mobility as advised by Drs. Rinella and Veselik.

PAST MEDICAL HISTORY:

As noted in the beginning of the "History" section, Ms. Reichenbach denied significant pain in her back or activity limitation due to back symptoms prior to the accident of June 18, 2004.

Ms. Reichenbach denied a history of cigarette smoking.

Ms. Reichenbach stated that she had three children, now ages 22, 24, and 26.

CURRENT COMPLAINTS:

At the time of this examination, Ms. Reichenbach complained of a chronic aching pain across her lower back and hip region. She stated that the pain was made worse by range of motion (bending or twisting) and was also made worse by lifting or carrying (for example, groceries). Ms. Reichenbach also stated that the pain in her back was made worse by prolonged maintenance of a single position (standing, sitting). She stated that her back was stiff, most notable in the morning upon arising or after prolonged sitting. She stated that she attempted to limit driving to 30 to 40 minutes to allow position change. Ms. Reichenbach stated that she felt some weakness in her lower extremities and sometimes used a cane to relieve pressure on her lower back.

Ms. Reichenbach stated that the pain from her back occasionally radiated to the mid back region and into both thighs with prolonged positioning.

Ms. Reichenbach stated that she had difficulty in sleeping due to her back pain and difficulty in twisting (for example, rolling over).

Ms. Reichenbach stated that she believed that she was "losing height" (approximately 1 inch).

Ms. Reichenbach stated that she continued to experience some neck discomfort without identifiable radicular symptoms.

Ms. Reichenbach stated that she was working part-time at the time of this examination in a customer service position for the Lemont Park District. She stated that the work was primarily as a "greeter" at the park district facility and was carried out for 6 to 12 hours per week. She stated that she was able to change positions, as needed, in the hours worked.

Ms. Reichenbach lived in a house that contained approximately 13 steps. She stated that she was able to climb steps, but used a railing for stability and back stress relief.

EXAMINATION:

On examination today, Ms. Reichenbach was a well-developed, well-nourished female. She appeared to be her stated age of 60-years. She was alert, oriented and cooperative in the examination.

She was 5' 9" tall and weighed 130 pounds.

She stated that she was right-handed.

Ms. Reichenbach moved stiffly today and preferred standing to sitting.

Examination of Ms. Reichenbach's back found no areas of scarring.

There was obvious right-sided scoliosis and midback kyphosis.

Palpation about Ms. Reichenbach's back found right-sided lower lumbar facet joint tenderness, tender "trigger points" in the right paralumbar musculature and tenderness over the right sacroiliac joint. There were no left-sided facet, myofascial or sacroiliac areas of tenderness.

Palpation about Ms. Reichenbach's back found no areas of generalized tenderness or muscle spasm.

Range of motion of the lumbar spine: Flexion 90 degrees, normal being 90 degrees; extension 15 degrees, normal being 35 degrees; right lateral bending 25 degrees, left lateral bending 20 degrees, normal lateral bending being 35 degrees.

Ms. Reichenbach complained of right-sided back pain at the extremes of range of motion tested.

Estimated kyphosis on clinical examination: 30 degrees.

Estimated rotary scoliosis on clinical examination: 30 degrees.

Rib to iliac crest space measurement: 3/4 inch on the right, 2 inches on the left (consistent with right rotary scoliosis).

Measurement of the circumference of the thigh at 6 inches above the knee: 16-1/2 inches on the right, 16 inches on the left; of the calves 14 inches on the right, 14 inches on the left.

Straight leg raising was full bilaterally in the seated and recumbent positions.

Deep tendon reflexes of the lower extremities were brisk and bilaterally symmetrical at the knees and ankles.

Sensation of the lower extremities was grossly intact and symmetrical to light touch.

Muscle strength of the lower extremities: Resisted hip flexion 4+/5 on the right, 5/5 on the left; resisted knee flexion 5/5 on the right, 5/5 on the left; resisted knee extension 5/5 on the right, 5/5 on the left; resisted ankle dorsiflexion 5/5 on the right, 5/5 on the left; resisted great toe extension 5/5 on the right, 5/5 on the left.

Ms. Reichenbach complained of right-sided lower back and hip region pain with right leg strength testing.

Ms. Reichenbach was able to heel and toe rise bilaterally, but had limited right heel walking.

There was tenderness over the right hip trochanteric bursa and proximal iliotibial band. There was no left trochanteric or iliotibial tenderness.

Range of motion of the hips: Forward flexion 140 degrees on the right, 140 degrees on the left, normal being 140 degrees; abduction 70 degrees on the right, 70 degrees on the left, normal being 70 degrees; adduction 40 degrees on the right, 40 degrees on the left, normal being 40 degrees.

Peripheral pulses of the lower extremities were grossly intact and bilaterally symmetrical. Venous return of the lower extremities was intact bilaterally.

Both lower extremities were warm to touch. There was no abnormal coloration or sweating of the lower extremities.

Distraction signs (axial loading, pelvic torsion) were negative.

Examination of Ms. Reichenbach's head and neck found no areas of scarring or deformity.

Palpation found tender "trigger points" bilaterally in the lower cervical and upper thoracic musculature.

Palpation about the neck found no areas of generalized tenderness or muscle spasm.

The Spurling sign was negative.

Range of motion of the cervical spine: Flexion 40 degrees, normal being 40 degrees; extension 25 degrees, normal being 25 degrees; right lateral rotation 60 degrees, left lateral rotation 60 degrees, normal lateral rotation being 60 degrees; right lateral bending 35 degrees, left lateral bending 35 degrees, normal lateral bending being 35 degrees.

Deep tendon reflexes of the upper extremities were brisk and bilaterally symmetrical.

Sensation of the upper extremities was grossly intact and bilaterally symmetrical to light touch.

ADDITIONAL MATERIALS:

As part of my evaluation of Ms. Reichenbach, I had the opportunity to review deposition testimony from Dr. Rinella dated August 25, 2009. Dr. Rinella discussed Ms. Reichenbach's multiple spinal abnormalities including the congenital and developmental abnormality of scoliosis and the acute traumatic abnormality of L1 burst fracture with associated kyphosis. Dr. Rinella stated his opinion that Ms. Reichenbach's underlying, preexistent condition of scoliosis was aggravated and accelerated by the L1 vertebral fracture causing breakdown and deformity with increasing impairment and disability. Dr. Rinella specifically noted the significant nature of the L1 "burst fracture," causing anterior compression (multiply described as 50 percent loss of vertebral height) and the delay in stabilizing of Ms. Reichenbach's spine likely associated with progressive spinal alignment deformity (20 to 25 percent initially deteriorating to 50 percent vertebral collapse at the time of brace stabilization). Dr. Rinella also noted that sacroiliac joint pain (sacroiliitis) was common in patients with the spinal deformities such as those evidenced in Ms. Reichenbach, and that the severity of injury to the L1 vertebra affected Ms. Reichenbach's entire spine. Finally, Dr. Rinella discussed in some detail the nature of spinal corrective surgery requiring extensive exposure and internal fixation and that, even following successful spinal stabilization surgery, significant lumbar impairment would be present due to back stiffness/loss of mobility.

CASE SUMMARY:

Ms. Reichenbach likely had some degree of thoracolumbar scoliosis as a congenital or developmental condition prior to her accident of June 18, 2004. By all accounts, Ms. Reichenbach was clinically asymptomatic and unlimited in daily activities prior to this date of accident.

Ms. Reichenbach's accident of June 18, 2004, caused severe injury to the L1 vertebra (burst/compression fracture), surrounding spinal levels and soft tissues, requiring medical treatment. Ms. Reichenbach's treatment was somewhat delayed at the time of her accident and then was initially conservative (without bracing). Unfortunately with this treatment, her L1 vertebra collapsed further (20-25% 6/25/04 progressing to 50% 7/1/04). Ms. Reichenbach's lumbar spine collapse ultimately stabilized with external bracing.

Ms. Reichenbach's recovery from the accident of June 18, 2004, was further complicated by increasingly symptomatic multi-planar progressive spinal deformity (L1 kyphosis and rotary scoliosis). These deformities have progressed over the years and are associated with thoracolumbar myofascial pain and sacroiliac joint pain. Extensive spinal reconstructive surgery has been discussed for spinal realignment (with multilevel decompression and fusion). Dr. Rinella has stated that this surgical procedure was for spinal stabilization only and would be unlikely to restore spinal function or work ability.

Examination today found obvious spinal deformity with kyphosis and scoliosis. On examination, there was tenderness over the right-sided lower lumbar facet joints and right sacroiliac joint as well as tender "trigger points" in the right paralumbar musculature. Examination also found decreased range of motion of Ms. Reichenbach's lumbar spine in extension and bilateral bending, right hip trochanteric bursal and proximal iliotibial band tenderness as well as mild right lower extremity weakness.

CONCLUSION:

Based on the findings of this examination, it is my opinion that Ms. Reichenbach's accident of June 18, 2004, caused significant anatomic/structural damage to her lumbar spine with burst/compression fracture of the L1 vertebra and marked vertebral deformity, aggravation and acceleration of preexistent, asymptomatic lumbar degenerative disc disease and degenerative arthritis (primarily immediately below the L1 fracture site) and aggravation and acceleration of preexistent, previously asymptomatic lumbar scoliosis with progressive spinal structural deformity, chronic pain and mobility limitation. These opinions are stated to a reasonable degree of medical certainty. In my opinion, Ms. Reichenbach's multiple spinal conditions (healed L1 vertebral fracture with significant vertebral deformity, multilevel lumbar degenerative disc disease and degenerative arthritis and significant thoracolumbar kyphoscoliosis) are continuing to cause significant back pain and stiffness and limit Ms. Reichenbach's vocational possibilities and ability to fully participate in activities of a daily life.

In answer to your specific questions:

1. In my opinion, based on all the information I have reviewed as described above, Ms. Reichenbach would have required significant work restriction in 2014, due to her condition of L1 vertebral body injury in 2004, lumbar degenerative disc disease and degenerative arthritis and thoracolumbar kyphoscoliosis. Restrictions at that time would have included limitation in any activity requiring repetitive bending or twisting and limitation in lifting to the "sedentary" physical demand level (10-pounds or less on an occasional basis) in an attempt to control progressive deterioration of her spinal anatomy.

2. In my opinion, Ms. Reichenbach's injury of 2004, and the progressive nature of her multiple spinal abnormalities aggravated by that injury, caused significant limitation in her employability and workability in the years 2013 and 2014, due to spinal deformity, stiffness and chronic pain.

3. In my opinion, Ms. Reichenbach's injury and multilevel lumbar degenerative disc disease and thoracolumbar kyphoscoliosis have both short-term and long-term effects upon employability. Short-term, Ms. Reichenbach would require significant work restriction as detailed above. Long-term, in view of the progression of Ms. Reichenbach's kyphoscoliosis, surgery will ultimately be required. The surgery, as described by Dr. Rinella, is extensive, requiring prolonged recovery (up to one year) after which Ms. Reichenbach would have significant permanent stiffness and would be, potentially, less mobile than her current state, though her spine would be stabilized.

4. As noted above, spinal fusion surgery as described by Dr. Rinella, would significantly limit Ms. Reichenbach's employability. The extensive spinal stabilization/fusion surgery would limit additional later debilitating progression of the kyphoscoliosis, but would also significantly limit Ms. Reichenbach's ability to work due to back stiffness and the need to limit stress on her now multiply-fused-spine and the adjacent levels (sacroiliac joints and hips) to prevent further breakdown adjacent to the spinal fusions.

5. Ms. Reichenbach's initial back injury appears to have been the accident of June 18, 2004, that caused an acute burst/compression fracture of the L1 vertebra. This high-energy impact injury also caused soft tissue injuries and adjacent level injuries in Ms. Reichenbach's spine, aggravating and accelerating preexistent, largely asymptomatic multilevel lumbar degenerative disc disease and degenerative arthritis as well as scoliosis.

6. In my opinion, it was evident that Ms. Reichenbach had multiple, significant spinal abnormalities as early as Dr. Rinella's initial examination on July 1, 2004, as well-documented in the multiple diagnostic tests obtained by Dr. Rinella in 2004, and the repeat diagnostic testing through 2011. The findings identified by Dr. Rinella, and clearly demonstrated on multiple, serial diagnostic tests (documenting the progressive nature of her kyphoscoliosis and degenerative arthritis and degenerative disc disease) are significant and explain Ms. Reichenbach's ongoing pain and stiffness -- limiting factors in employment and activities of a daily life.

7. Based on this evaluation, I would describe Ms. Reichenbach's condition as one of chronic, severe back pain and stiffness with some right lumbar radiculopathy symptoms, unimproved by treatments, to date, and progressive in nature (in view of the radiologically-identified progression of spinal deformities).

8. In my opinion, the conditions of Ms. Reichenbach's spine are permanent and will continue throughout the remainder of her life.

9. In my opinion, Ms. Reichenbach has limitation in her ability to bend from side-to-side, extend her spine (backwards bend) and twist her spine as well as an inability to sit or stand for prolonged periods of time. These limitations clearly impact Ms. Reichenbach's ability to perform activities of daily life and work as reflected in the restrictions described above.

10. Based on current examination findings, the only reasonable and appropriate treatment for Ms. Reichenbach's spine at this time -- short of the extensive spinal stabilization surgery discussed by Dr. Rinella -- would include a home exercise program to maintain core strength and restriction in loaded extension and twisting of her spine (for example, lifting and twisting).

If I may be of further assistance in this case, please feel free to contact me.

Sincerely,

Jeffrey Coe

Jeffrey E. Coe, M.D., Ph.D.

JEC:ss

JEFFREY E. COE, M.D., Ph.D.
Occupational Medicine Associates of Chicago, Ltd.
22 North Morgan, Suite 110
Chicago, Illinois 60607

(312) 733-6622

Educational Background

Degrees:	B.S. (Zoology), 1966, Magna Cum Laude University of Michigan, Ann Arbor
	M.D., 1970 University of Chicago
	Ph.D. (Occupational Medicine), 1985 University of London (London School of Hygiene)
Honors:	Phi Beta Kappa, Phi Kappa Phi, University of Michigan
Internship:	University of Michigan Hospitals, Ann Arbor, 1970-1971
Residency:	University of Michigan Hospitals, Ann Arbor, 1971 (Department of Pediatrics)

Medical Practice

1972–1974	*Attending Physician*, University of Michigan Health Service Ann Arbor, MI
1974–1976	*Director*, Employee Health Service and Attending Physician B.S. Coler Memorial Hospital New York City Health and Hospitals Corporation, New York
1976–1979	*General Practice* Chicago, IL
1980–1984	*Regional Medical Director*, Republic/LTV Steel Corporation Chicago, IL
1985–1989	*Area Medical Director* (Loss Prevention), Liberty Mutual Insurance Chicago, IL
1989–1990	*Medical Director*, Clinical Services, U.S. Occupational Health Chicago, IL
1990–1991	*Occupational Medicine Consultant*, Mercy Hospital and Medical Center Chicago, IL
1991–Present	*Medical Director*, Occupational Medicine Associates of Chicago, Ltd., Chicago, IL

Academic Appointments

1974—1976 *Instructor*, Department of Community and Preventive Medicine
New York Medical College

1988— *Adjunct Assistant Professor*, Section of Occupational and Environmental Health, Department of Medicine
University of Illinois at Chicago

Grants and Fellowships

1965—1966 Substrates for vascular smooth muscle contraction (with Dr. D. Bohr)
National Science Foundation

1972—1973 Incidence of stress-related disease in a college student population
(with Dr. G. Nordine and S. Cobb)
National Institutes of Health

1979—1980 Human ocular responses to chemical irritants
European Coal and Steel Community (EEC) Research Fund

1984—1985 Human ocular responses to chemical irritants
NATO Science Fellowship

1991—1993 Prognostic Factors in Occupational Low Back Pain (with Dr. D. Drury)
NIOSH Research Grant

Medical Licensing/Certificates

Diplomat, National Board of Medical Examiners, 1971

Licensed for medical practice: Michigan (1971), New York (1973), Illinois (1974)

Board Certified in Occupational Medicine (American Board of Preventive Medicine), 1991

Certificates in Impairment Evaluation (*AMA Guides to the Evaluation of Permanent Impairment, 6th Edition*)

Publications

Coe, J., Detar R., and Bohr, D., "Substrates and vascular smooth muscle contraction", Am. J. Physiol 214:245-50, 1968.

Coe, J., "The physician's role in sickness absence certification: a reconsideration", J. Occup. Med. 17:722-24, 1977.

Coe, J., and Douglas, R., "Objective measurement of ocular responses to chemical irritation", J. Physiol. (London) 308:53-54, 1980.

Coe, J., and Douglas R., "Sensations of 'unpleasantness' and 'irritancy' in response to irritant gases and vapors", J. Physiol. (London) 319:47-48, 1981.

Publications (cont'd)

Douglas R., and Coe, J. "A system for assessing the physiological effects of irritants on the eye", Clin.Sci. 61:27, 1981.

Coe, J., and Douglas R., "The effect of contact lenses on ocular responses to sulphur dioxide." J. Soc. Occup. Med. 32:92-94, 1982.

Coe, J., and Douglas R., "In vivo localization of human ocular chemoreceptors", J. Tox. Cut. Ocul. 3:3-5, 1984.

Gill, F., Douglas, R., and Coe, J., "Effects of dust on respiratory function in ballet dancers", Thorax 39:692, 1984.

Douglas, R., and Coe J., "The relative sensitivity of the human eye and lung to irritant gases", Ann. Occup. Hygiene 32:265-267, 1987.

Coe, J., "Comment: Hand/wrist pain and the carpal tunnel syndrome," J. Occup. Med. 30:540-541, 1988.

Coe, J., "Occupational carpal tunnel syndrome: clinical characteristics of an affected population and utility of screening techniques", presentation to W.H.O. International Conference on Occupational Musculoskeletal Disorders, Milan, Italy, October, 1990.

Coe, J., and Douglas, R., "Ocular Responses to Chemical and Physical Injury", in Zenz C., ed., Occupational Medicine: Principles and Practical Applications, 3rd Ed. (Chicago: Year Book Medical Publishers, 1994).

Kornberg, J., Rosenberg, N., Bradley, M., Dickerson, B., Coe, J., and Spengler, J. "Objective Evidence of a Relationship Between Immunological Dysfunction and Poor Indoor Air Quality", Environ Epi. Tox. 1:175-182, 1999.