## Carolinas Pain Institute

March 31, 2020

Compulsory medical examination: January 30, 2020 Anais Moyal

RE: Case name Anat Moyal as parent and guardian of Anais Moyal, a minor v. Medieval Knights, LLC and Jaqueline Doucet

Case #: 16-1975 CA 01

Medical records reviewed: Medical records from Dr. Gregory Pearl, medical records from Bay Harbour Pediatrics, medical records from Nicholas Children's Hospital, supplemental medical records from Nicholas Children's Hospital, medical records from HealthMark Group, deposition testimony of Dr. Gregory Pearl, Anais Moyal, and Dr. Kester Nedd, plaintiff's complain for damages, and plaintiff's answer to defendant's interrogatories.

**Chief Complaint:** Right upper extremity pain, left upper extremity pain, neck pain, headaches, and "rest of body" pain.

**History of Present Illness:** Ms. Moyal states her problems began November 4, 2014. She was riding her bicycle while rehabilitating her left knee from surgery one month prior when she was struck by a car while riding from the sidewalk and through a crosswalk.

Ms. Moyal was not wearing a helmet at the time and was on a "casual" bike as she described it. She states she was struck as the car turned right impacting her left side causing her to fall on the right side.

Ms. Moyal states to me that she is "fuzzy" on any of the details following the accident. Her deposition and other records support that police came to the scene but she refused any medical treatment. She was able to ride home on her bicycle following the incident.

Ms. Moyal recalls going either the next day or two days later to see Dr. Spurdle. This was a scheduled appointment for her left knee which had been operated on in October 2014. She notes that her knees were somewhat swollen and recalls Dr. Spurdle doing x-rays of the knees. She was told there were no fractures.

Other records suggest Ms. Moyal saw her pediatrician Dr. Steven Siegel on November 6, 2014 for pain in her shoulders and knees.

On November 8, 2014 Ms. Moyal went to Miami Children's Hospital Emergency Room complaining of right lateral neck pain, bilateral elbow pain, right-sided chest pain, right-sided rib pain, and bilateral knee pain. Today, Ms. Moyal recalls getting ultrasound of the stomach and that her ribs were particularly hurting. She also remembers her right arm as the primary area that was causing pain.

Through these early times Ms. Moyal recalls Dr. Spurdle mainly focusing on her knee as this was the area he had operated on. Diagnoses from Miami Children's Hospital included post-traumatic back sprain, post-traumatic back strain, and post-traumatic rib pain.

Almost 4 weeks later Ms. Moyal went to see Dr. Kingler for continued pain in the neck, midback, low back, bilateral shoulders, bilateral elbows, bilateral wrists, and bilateral knee. She was diagnosed with sprain/strain in the above noted areas. She was recommended to start physical therapy. Ms. Moyal went to physical therapy and eventually was cared for by Dr. Tischenko. Prior to Dr. Tischenko there was some physical therapy at Path Medical Center and at Miami Children's Hospital from February 17, through March 3, 2015.

There were 2 visits in January 2015 when Ms. Moyal saw her pediatrician, Dr. Siegel, for nausea, epigastric pain, and bitemporal headaches.

On February 12, 2015 Ms. Moyal saw Dr. Ibraham Anjad for pain and tingling in the right and forearm extending to the neck.

EMG's and MRI's were performed on February 16 and March 5, 2015 respectively. EMG reported no abnormalities. The MRI of the brachial plexus, spine, and right shoulder at Miami Children's Hospital revealed no abnormalities.

Physical therapy continued from March 2015 through August 7, 2015 at Miami Children's Hospital Midtown Outpatient Center and the PT and Wellness Center. Ms. Moyal treated with Dr. Tishchenko at PT and Wellness Center.

Ms. Moral relates to me that Dr. Tishchenko was very helpful at helping to figure out what was going on. She is somewhat unclear if it was Dr. Tischenko who helped refer her to Dr. Kester Nedd.

From medical records it appears Ms. Moyal was referred to Dr. Anna Tishchenko from Dr. John Grossman. Dr. Grossman saw Ms. Moyal on April 14, 2015.

Ms. Moyal saw her pediatrician Dr. Siegel on August 19, 2015 and subsequently on September 24, 2015 received a trigger point injection in her neck by Dr. Raphael Gonzalez during a visit at Miami Children's Hospital.

On November 9, 2015 Ms. Moyal saw Dr. Martinez-Arizala for persistent right neck and upper extremity pain with weakness and numbness in the right fingers. It was noted that she had allodynia to pinprick and decreased range of motion in the right rotator area. She was diagnosed with traumatic brachial plexopathy and neuropathic pain syndrome.

A repeat MRI of the right brachial plexus was performed December 11, 2015 and no abnormalities noted.

Ms. Moyal saw Dr. Joseph Patin and a right stellate ganglion block was recommended on February 1, 2016. Ms. Moyal was seen March 16, 2016 by Dr. Andrew Sherman who diagnosed her with thoracic outlet syndrome, carpal tunnel syndrome, and trapezius muscle spasms with focal cervical dystonia. Recommendations were for Lidoderm patches, additional physical therapy, and Botox injections of the trapezius muscle.

The Botox injection in the right upper trapezius and levator scapulae areas were performed on March 31, 2016 by Dr. Sherman.

Ms. Moyal also underwent an ultrasound Duplex arterial exam of the upper extremity which revealed elevated velocity in the right subclavian artery with abduction of the right arm to 180 degrees.

Evaluation by Dr. Sherman on April 20, 2016 noted continued right-sided neck pain, arm numbness, hand numbness and pain. Significant pain on palpation of the trapezius muscle was noted, lack of pulse and symptom production was noted with Adson test, Allen test, and Roos test. Thoracic outlet syndrome was diagnosed. The patient had scheduled repeat MRI of the brachial plexus and dynamic MRI of the right upper extremity.

These tests were performed on May 14, 2016 and showed moderate compression of the subclavian artery with greater than 50% narrowing of the costoclavicular distance. It was also listed that brachial plexus compression was possible.

During this time, Ms. Moyal was enrolled in what she described as "real school". She states it was often "hell". She states she missed lots of school and had trouble doing much of her schoolwork because of the pain.

In her deposition Ms. Moyal stated she was able to play basketball her junior year during the times listed above. In her deposition she states she averaged 11 points per game and approximately 8-9 assists per game as the point guard of the team.

In today's interview Ms. Moyal states she did play basketball but was often on and off the court. She states she played limited minutes and there were quite a few games when she could not play. She notes she was in a lot of pain and "could not shoot" because her hand would go numb. Ms. Moyal notes there was no new injury to account for the pain she was having her junior year in her arms.

Ms. Moyal also notes she was having pain in both her knees during this time. She also had pain in her neck. She also reported headaches but is not sure when they started. She also noted during the eleventh grade she was having trouble writing and was having difficulty with studying and most other

activities during the school year. She states in part this was because no accommodations were being given because there had been no definitive diagnoses.

In today's interview, Ms. Moyal is not sure exactly when the diagnosis of thoracic outlet syndrome or complex regional pain syndrome was made.

In plaintiff's notice of filing answers to defendants it is noted on August 31, 2016 that Ms. Moyal was seen by Dr. Hillary Snapp for videonystagmography evaluation. It was noted that Ms. Moyal had started online school due to her thoracic outlet syndrome. She was also diagnosed with right peripheral vestibulopathy. Ms. Moyal continued through these months with physical therapy at PT and Wellness Center with Dr. Tischenko.

Ms. Moyal was seen September 30, 2016 by Dr. Gregory Pearl, MD, FACS for symptoms associated with her thoracic outlet syndrome. It appears this was one of the first times she was also diagnosed with complex regional pain syndrome. She recalls researching the internet to find Dr. Pearl as a thoracic outlet specialist.

Ms. Moyal states the symptoms she was having with her right-side thoracic outlet syndrome was decreased pulse in the right hand particularly whenever her hand was raised above her head, shooting pain that was more prominent in the right upper extremity and her right hand was staying in a closed or clenched position. She noted she had decreased range of motion in the right upper extremity.

On October 20, 2016 Ms. Moyal underwent thoracic outlet decompression surgery by Dr. Pearl along with cervicothoracic sympathectomy. Surgical procedures included first rib resection, brachial plexus neurolysis, cervicothoracic sympathectomy, lysis of subclavian vessels, right pectoralis minor tenotomy and right anterior middle scalenectomy. Ms. Moyal was discharged 8 days after surgery. Ms. Moyal states to me since surgery the shooting pain has not returned and has been better in the right upper extremity. She also notes she has better range of motion in the right upper extremity and can raise her arm above her head.

A January 26, 2017 visit with Dr. Siegel noted contracture of the right hand and limited movement of the right upper extremity.

Ms. Moyal saw Dr. Kester Nedd on January 30, 2017 secondary to ongoing chronic headaches and chronic pain of the right upper extremity. She was diagnosed that day with agoraphobia with panic disorder, generalized anxiety disorder, trigeminal autonomic cephalgia, tension type headaches, insomnia, and mononeuropathies.

Ms. Moyal also saw Dr. Kiley Reynolds on February 6, 2017 for her complex regional pain syndrome of the right upper extremity. A right stellate ganglion block was performed and a subsequent right stellate ganglion injection was also performed on February 13, 2017. Four additional stellate ganglion blocks were performed on February 20, February 27, March 6, and March 13, 2017.

On today's visit Ms. Moyal remembers getting a "droopy eye" with stellate ganglion blocks. However, she does not feel that there was any difference in the pain following the stellate ganglion blocks. She feels there may have been some slight benefit in helping to mobilize the arm for physical therapy that was done after the blocks were performed.

Ms. Moyal feels some of her problems are due to the fact that she was "diagnosed late" concerning the thoracic outlet syndrome and complex regional pain syndrome. She does not blame anyone for this and has been told it is often hard to make these diagnoses. She states prior to those diagnoses being made she was given the vague diagnosis of brachial plexus injury.

Ms. Moyal returned to Dr. Pearl in January 2017, approximately 3 months after surgery, for follow up. The patient was counseled that the hyperaesthetic pain and tenderness should resolve over time and was most probably a result of post-sympathetic neuralgia. It was noted she was continuing to experience severe daily pain in the right neck, shoulder, and upper extremity.

Ms. Moyal was seen back by Dr. Pearl in December 2017 and was developing increasing symptoms on the left side. An EMG of the left upper extremity did not reveal any abnormalities. MRI/MRA showed no abnormalities. Specifically, MRI of the left brachial plexus was normal. A left-sided thoracic outlet syndrome surgery was performed in December 2018 by Dr. Pearl.

Ms. Moyal states to me twelfth grade was somewhat easier for her as she was no longer in a physical school but was doing "virtual school". She states this was easier as she was able to catch up when she fell behind in studies. She also could more easily go to treatments and overall it was a more ideal situation for her. She also notes that the exams were not timed which made things easier. She also could use dragon to dictate reports etc. She was able to graduate on time from the virtual school at the end of her twelfth year.

Ms. Moyal enrolled at the University of Miami in the fall of 2017. She notes she did take spring semester 2019 off after having the thoracic outlet syndrome surgery done in December 2018.

Ms. Moyal reports to me that the symptoms on the left were very similar to the symptoms on the right. She was having burning sensation which was the same but not as severe as the right side. She also reported numbness, lack of pulse, and shooting pain that was similar between both sides. She also was unable to lift her arm above her head. Ms. Moyal notes the surgery on the left helped like on the right. It helped somewhat with the burning but helped significantly with sweating symptomatology. She also was able to get movement back in the fingers and actually did better on the left side than the right although she is still experiencing some weakness on the left side.

Ms. Moyal states she continues with physical therapy to this day. She is doing physical therapy approximately 2 times per week now. She is doing this at Children's Hospital of Miami with Evet Alias.

Ms. Moyal states this is a little less than when she used to do therapy 3 times per week but this has been necessitated by her school schedule.

Ms. Moyal states sophomore year was easier for her than freshman year at University of Miami. Particularly, she learned the campus better and how to navigate along with her special needs. She used the example of knowing where elevators were better and to avoid stairs. She states she gets very scared on stairs particularly in the science building because they are steep. She also feels that stairs aggravate her shoulders and arms and make things more painful. She also has some pain in her knees when she tries to use stairs.

Ms. Moyal has not quite decided on a major but is still thinking of either becoming a medial doctor or doing PhD work and possibly focusing on research.

Ms. Moyal states she has had to carry a reduced school load because of her conditions. She states her grades have been good. She notes the University of Miami has been very good at providing accommodations and assistances for her. She has someone who does note taking and she also records all of her classes as she cannot take notes contemporaneously. She is right hand dominant and has not tried to use her left hand to do writing.

Ms. Moyal also notes she is able to take exams at the Office of Disability which helps. She can use the computer for exams and gets extra time to take her exams.

Ms. Moyal states she lives in a single room with her dog, Luna. She has had the dog for approximately 2 years. He is a registered service dog. His service is in the area of epilepsy. Ms. Moyal states he also serves as a therapy dog for her.

Ms. Moyal notes that Luna is able to pick things up for her and can actually also bring her meds to her that are kept in a plastic bag. He has also been trained to tap the handicap button to open doors for her. He also has learned how to "block and guard" her right side when she is in a crowd. Normally however, he is trained to walk on her left side.

Ms. Moyal states she particularly needs Luna when she feels "overwhelmed". This occurs when she is in places where there are crowds or loud noises. She is also quite fearful that someone will bump into her arm.

Ms. Moyal states she continues to have problems with her epilepsy. She had an EEG done a couple of weeks ago by Dr. Nedd. She has been told she has two types of seizures which include pseudoseizures and epileptiform seizures. She notes she had lots of seizures during exams. Her seizures tend to be more prevalent when she is either stressed or sleep deprived. Ms. Moyal states Dr. Nedd was happy with the EEG results a couple of weeks ago. He had started her on Aptium which he feels is helping.

Ms. Moyal feels the seizures she had in the beginning of January 2020 were pseudoseizures in nature. She notes that she does usually lose consciousness but she does not always sense this. She does not have auras but feels like her dog Luna senses when she is about to have a seizure and alerts her to go to a safe place.

Ms. Moyal has never driven even when younger. She states "it scares me".

Ms. Moyal notes that the sympathectomy surgery also helped with sweating symptoms that she having in both upper extremities. She has not had any cardiac symptoms or problems from the sympathectomies.

Ms. Moyal most recently saw Dr. Pearl in November 2019. She says she is now scheduled to see him yearly. He is trying to help her get into laser therapy for her pain and inflammation.

Ms. Moyal states she has been to see Dr. Anthony Kirkpatrick in Tampa. Dr. Kirkpatrick spoke with her about ketamine treatments. However, it was felt that she needed to have her seizures under control before these would be considered.

Ms. Moyal also feels she has had several people talk to her about possible spinal cord stimulators. This includes Dr. Reynolds and Dr. Pearl. She states while it may have been recommended she is not confident or sure that she wants to go through a surgery where leads are placed close to her spine.

She has now mainly been told to try to keep things under control with physical therapy.

**Medications**: Aptium 800 mg BID (has helped with seizures), Neurontin 600 mg TID (helps slightly with pain), Zoloft 100 mg q day (helps with depression/anxiety).

Allergies: None.

**Visual Analog Scale:** Ms. Moyal states her pain in the right arm is usually 7-8/10. It can flare to 10/10 and depends on what is going on. Particularly, if she is studying a lot or doing a lot the pain will flare. She states when it flares that this is the way she knows to decrease activities and try to rest.

Left arm VAS is 6-7 on a 0-10 scale. Both of the VAS for the arms include shoulder and neck by her report.

We decided the rest of her pain would be labeled as "rest of body". This includes her leg, back, and head. These pains are all 5 on a 0-10 scale.

Ms. Moyal states she is getting Botox every 3 months in the front and back of her head which helps significantly with her headaches. She notes she can have increasing pain toward the end of a cycle and tries to stay ahead of this. She is getting the Botox at this time every 3 months.

Ms. Moyal states she uses her left arm the most. She notes when she does use it too much it will flare like the right one. She notes she is particularly sensitive to new clothes and the new texture associated with clothes. She notes if she is not used to the texture it can flare her pain.

Of note, she states Tommy Hilfiger has now come out with a "adaptive" line of clothes. She has jeans where the seams are hidden, buttons are magnetic, the zipper is Velcro and states this has "made life better".

Ms. Moyal also states to me that the "rest of body" pain is often to her a "background noise". She states it feels like "extra" pain.

Ms. Moyal often also wears earplugs of some type because of noises being loud and bothersome to her. She has a pair in place today which she states help with dampening of the noise. She also sometimes uses Bluetooth earplugs. She does not like to use pods as the extensions on them bother her face.

Ms. Moyal was treated between her senior year of high school and freshman year of college at Children's Specialized Hospital in New Jersey. This is where she first was given the diagnosis of AMPS (amplified musculoskeletal pain syndrome). This program was a 5 weeks inpatient program. Ms. Moyal states it did help her to become more independent and she learned how to, for example, put up her hair and tie her shoes. She went there after her high school graduation.

Ms. Moyal describes her pain as burning. She states the hands are worse but it extends up to the shoulders and neck. She states she often notes redness in the hands. She notes the redness increases when she is in a lot of pain.

Ms. Moyal notes there is some slight shooting pain but that is not a predominant symptom at this time. She notes the burning can, as stated, radiate to the shoulders on both her left and right upper extremities.

She notes after a shower water will often bring out the redness. She states that there has only been an occasional time that her right hand will turn blue.

Ms. Moyal has worn a splint on the right upper extremity for several years. She states the current splint she has had for 3-4 months. She feels this is a better one than the one in the past which had to adjust rods to keep the hand and fingers extended. Ms. Moyal feels the current splint is much more functional. She believes she first started wearing a splint in high school.

Ms. Moyal states she often wears a flat splint on the right and left hand at night. These finger splints on the left will help her to keep her hand extended.

**Social History:** Ms. Moyal does have an older brother. She has no boyfriend. She does not smoke or drink. She is on disability according to her deposition.

**Past Medical History:** Significant for epilepsy, headaches, multiple traumas and fractures as a child. History of 3 right wrist fractures 1 from tennis and 2 from basketball that were casted and did not require surgery. These were treated by Dr. Spurdle.

**Past Surgical History:** Two prior knee surgeries on the left most recently October 2014 and one prior. Right thoracic outlet syndrome surgery October 20, 2016 and left side thoracic outlet syndrome surgery December 2018.

Ms. Moyal states she sees Dr. Nedd every 2-3 months which is mainly for medication adjustments. Her pediatrician, Dr. Spiegel has retired. She has been seeing Dr. Zacarias. She is planning to switch soon to an adult medicine primary care doctor.

Ms. Moyal also sees Dr. Kato, psychiatrist who she sees approximately every 6 months. She has been following with Dr. Kato for about 1.5 years. Dr. Kato prescribes Zoloft which does help as noted above. She has only been diagnosed with depression while she was in New Jersey and agrees with this diagnosis. She also sees a psychologist, Aleisha Lezniak. She has seen Dr. Lezniak for approximately 2 years and sees her every week. Dr. Lezniak does not work on her pain problems but mainly works on depression. Ms. Moyal states she does do some of the cognitive therapies and other psychological interventions that were taught to her in New Jersey.

Ms. Moyal has also seen Dr. Poleen Buck for eye therapy. This is secondary to light sensitivity which has been a problem since the accident and started approximately 1 year ago. She states she often wears special sunglasses inside and out.

She notes work with Dr. Buck has been helpful in her ability to read and not skip lines or get lost while reading.

When I asked Ms. Moyal to try and put a percentage on how much better she is since her 2 thoracic outlet surgeries she was unable to do so. She states she is not worse but was unable to give any percentages as to how much better she is now. She notes that she feels that she got better in the ways she was led to believe she would get better. For example, she states they told her she would not get better with the burning pain and in fact that has not improved.

Ms. Moyal notes that she used to travel to Israel on almost a yearly basis as she has much family there. She has gone one time since the injury and it was very hard on her and she has not returned since then.

Ms. Moyal states most of her trips have been short flights. This includes Dallas, New York, and Boston. Her brother is currently working at Brandeis University in Boston and she has visited him. She states she usually needs to rest after the flights. She also tries to get to the airport early. She notes she does have precheck for TSA which helps.

For activities Ms. Moyal does enjoy watching basketball and soccer. She states she is quite a big fan of both of these sports. It was somewhat unclear to me as she states she has only been to 1 game in the past 5 years but also stated whenever she goes she sits in the disability spot and always goes with 1-2 people to protect her. She also wears noise cancelling headphones and special glasses to shield the light. She has also been to 1 University of Miami game.

Ms. Moyal did state that the splints are important for her to keep her hand open. She feels that without the splints that her hands will return to a clawed position. She does not wear a splint on the left hand during the day.

Ms. Moyal notes she still has pain in both her knees. The left knee has primarily little bits of sharp pain on the inside and she continues to strengthen it. She notes the right knee has some problems because she relies on it more but overall, she has more pain in the left knee than the right knee.

**Physical Examination:** Ms. Moyal is a pleasant female. She speaks in quiet tones but answered all questions appropriately. Her mother and father accompanied her to the visit but did not answer any questions nor help her with any of her questions.

Ms. Moyal did not become tearful at any point during the exam. She was animated and was able to laugh at some of her answers or the situation.

**HEENT:** Cranial nerve III-VII were intact to gross testing. She did note tenderness bilaterally in the TMJ region. There also was tenderness in the scalp and occipital nerve regions bilaterally. She had negative Spurling's test.

She was quite tender to palpation in her neck and was significantly allodynic over her thoracic outlet scars in the neck and right shoulder area. She was able to wear some type of bra strap without any noted difficulty.

Ms. Moyal preferred to place the stethoscope herself and was able to do this such that her heart was regular rate and rhythm auscultation. Lungs were clear to auscultation. This did not seem to cause her pain although light palpation in the same areas over the upper chest were easily evoking tenderness in a widespread distribution. Similarly, there was pain midline in the spine and also in the many of the midback muscles and soft tissue regions. The low back had less tenderness to palpation.

Abdomen with soft with positive bowel sounds.

Lower extremity exam: Ms. Moyal presented with tennis shoes and sock on. She was able to ambulate without any noticeable antalgic gait. There are well-healed portal scars on the left knee. Reflexes were 3+ equal and brisk in the patella and Achilles region. The left patella reflex invoked a somewhat delayed pain response with tapping.

Tapping was purposefully done over the tendon and not over the portal but seemingly referred pain to the portal site by patient. The patient had full extension of her lower extremities without discomfort. She notes walking short distances as requested today do not exacerbate pain in her legs.

Sensory testing in the lower extremities revealed abnormal but present sensation to vibration and cotton. There was normal sensation to alcohol.

Upper extremity evaluation: Upper extremity evaluation was limited secondary to pain. The patient has full range of motion of her elbows without problems. She presented today with a sweatshirt and a short sleeve shirt. The sweatshirt was kept in a 3/4 arm position. She was able to take her splint, glove, and full arm wrap off with some difficulty. Ms. Moyal was able to extend the fingers on her left hand seemingly with some difficulty but related only to pain. No contractures were noted. The right hand was also in extension while in the splint but went more into a curled position when the splint was removed. No hyperhidrosis was noted. No color changes were noted. I was unable to do a full sensory exam at patient request. She requested I not use any alcohol, vibration, or cotton testing. She states this would cause significant pain. She did allow infrared temperature testing but after 3 measures she requested this be discontinued. The assessments revealed the following in Celsius:

·	Arm	Dorsum of the hand	Palmer surface of the hand
Left	35.4	35.2	Not done at patient request
Right	35.1	Not done at patient request	Not done at patient request

Circumferential measurements were also not made of the arm at patient request.

Sensory testing of the upper extremity was not done at patient request.

## Assessment:

- 1. Status post bicycle accident November 4, 2014.
- 2. Psychogenic right upper and left upper extremity pain unrelated to #1.
- 3. Widespread pain syndrome affecting upper extremities, lower extremities, back, neck, and head, unrelated to #1.
- 4. Headaches, unrelated to #1.
- 5. Seizures both pseudoseizures and epileptiform seizures unrelated to #1.
- 6. Thoracic outlet symptoms, defer to other specialists.
- 7. Status post thoracic outlet surgery right and left October 20, 2016 and December 2018, respectively.
- 8. Photophobia with significant light sensitivity, auditory hypersensitivity.

## Recommendations:

- 1. Recommend patient continue with her psychological counseling and psychiatric visits.
- 2. Encouraged patient to continue with her occupational therapy and home therapy exercises.
- 3. The patient should continue to use right and left upper extremities.

Wichard L. Rauck, MD

RLR/tla