Highland
Musculo-Skeletal
Associates, Inc.

June 15, 1996

Robert C. Corn, M.D., F.A.C.S.
Timothy L. Gordon, M.D.
Orthopaedic Surgeons

Kirk E. Roman
Attorney at Law
The Superior Building, 21st Floor
815 Superior Avenue, N.E.
Cleveland, OH 44114-2701

RE: Clifford Vaughn
Case No. 290309
File No. 1700-12953

Dear Mr. Roman:

I evaluated the above plaintiff in my Euclid Office on June 7, 1996, in reference to alleged residuals of injury sustained in a motor vehicular accident which occurred approximately three years ago on June 9, 1993. Throughout the history and physical he was accompanied by Karen Gallagher, a paralegal from the plaintiffs law firm.

The history was presented that he was a driver of a motor vehicle stopped in the line of traffic while south-bound on Richmond Road in Lyndhurst, Ohio. The accident occurred in the vicinity of Corless Road between Wilson Mills and Ridgebury Roads. He was stopped in the line of traffic and a rear-end collision occurred. He was the driver and his wife was a front seat passenger. The vehicle was described as a 1957 Maxima station wagon.

At the moment of impact he was thrown forward and backwards. It was difficult to establish the intensity or severity of the impact. He complained of an instant headache with severe neck and upper back pain. His wife drove home.

Subsequently they were evaluated at the University Suburban Urgent Care-Center on Green Road in South Euclid, Ohio. He complained of a bad headache at that time. X-rays and examinations were performed. He also complained of pain in his left shoulder and chest region.

He was referred from his family physician, Dr. Bruce Campbell, to an orthopaedic spinal specialist, Dr. Henry Bohlman. He initially saw Dr. Bohlman on June 30, 1993, a few weeks later. As will be discussed below, complications and residuals of a previous neck surgery were noted. Surgery was recommended. There were no visits with Dr. Bohlman through the summer of 1993 until September of 1993. Further diagnostic workup was commenced including a cervical myelogram and CT scan, as well as MRI scans. This was to more clearly prepare for surgery for this complex pseudarthrosis of the cervical spine.

Perhaps discussing his complex past medical history would be more appropriate. The patient was involved in a severe motorcycle accident in 1982. In addition to multiple injuries, he sustained a fracture of the upper cervical spine. This occurred in Delaware, Ohio. He was transferred to Akron where he came under the care of Dr. Daniel Betham. Two procedures were done in 1982, one in July initially attempting to fuse the C1-2 level with one type of fusion, and then approximately five months later, because of a failure of fusion, as second procedure was performed. Apparently this was somewhat successful in that it relieved the pain. However, on review of the x-rays and scans done associated with the 1993 accident, it was noted that he had pseudarthrosis or a false fusion of this area. He apparently was existing without neck pain until the 1993 accident.

Going back to 1993, the diagnostic workup did show the pseudarthrosis with broken sub-laminar wires. The wires were in close proximity to the spinal cord. It was for this reason that all of the diagnostic studies were performed in order to prepare for a somewhat difficult surgical procedure.

He was ultimately admitted to University Hospitals of Cleveland on December 15, 1995, with a diagnosis of "failed posterior cervical fusion C1-2 x 2 attempts". A complex procedure was performed in which bone graft was taken from the iliac crest area and all of the broken wires were removed. It was decided to fuse the occiput, that is the skull, to the C2 vertebra in order for a solid fusion to occur. This was accomplished and postoperatively when followed-up, the fusion had healed completely. It was expected with this operation that he would lose approximately 40% of rotation of the head and neck, He was in a hard collar for about 14 weeks. He never had any physical therapy to rehabilitated his neck, upper back, or shoulder muscles.

The diagnostic workup did also review diffuse degenerative changes in the mid and lower cervical spinal region. These again were not traumatic in origin.

CURRENT CONDITION: He is no longer on any medication. He still complains of a fair amount of stiffness in rotation. *Also* in the right hand he is complaining of numbness which was described in the records as a C6 radiculopathy. However, on careful questioning this was really a right carpal tunnel syndrome. He still develops headaches with changes in weather, particularly damp weather. There is a diffuse type of neck pain. He tends to avoid using his upper extremities as this causes upper back and neck discomfort. He gets episodes of "tight muscles and spasms". Sometimes they are so severe he has to lay down and rest. He avoids using his arms over his head. He claims to have limited lifting capacity. Limited standing, lifting and walking were also noted. The worst aspect; however, is the weather, particularly damp weather.

He is currently employed as a general contractor. He states he doesn't do a great deal of the work himself. At one time he was able to lift heavy shingles and carry them up for roofing work. As stated above, there has been no attempt at muscular rehabilitation.

PHYSICAL EXAMINATION revealed a pleasant 49 year old male who appeared somewhat older than his stated age. His gait pattern was normal. He was able to arise from a sitting position without difficulty. Ascending and descending the examining table was performed normally.

Examination of his cervical spine revealed the well-healed scar in the midline compatible with his surgical history. There was only one scar present. Part of the last operation was excising the old scars. There was also two incisions noted in the iliac crest region from his bone grafts done for his prior 1993 surgery.

Examination of the cervical spine revealed a significant restriction of motion in forward flexion, extension, side bending and rotation. There was approximately 40% limitation of motion in all directions. This was not associated with any spasm, dysmetria or muscular guarding. There was proportional muscle development although for his bony frame the muscles appeared to be symmetrically smaller than expected. There was; however, no atrophy. This was probably due to his lack of physical therapy and weight training for the past three years.

Protraction, retraction, and elevation of the scapulae were performed normally. There was a full range of motion of both shoulders, elbows, wrists, and small joints of the hand.

A detailed neurologic examination was performed. This did not reveal any stigmata or radiculopathy. There was a very positive Tinel and positive Phalen sign at approximately seven seconds on the right side, clinically indicating a strong possibility of carpal tunnel syndrome not radiculopathy.

IMPRESSION: Cervical strain. By history, aggravation of a pre-existing pseudarthrosis. The reason for the surgery was the pseudarthrosis not the motor vehicular accident.

DISCUSSION: I have had the opportunity to review a packet of medical records, primarily from University Hospitals of Cleveland. Included in this are the records for the treatment of his neck, as well as for the arthroscopic surgery he had on his knee. The knee was not part of this claim.

After careful questioning of the patient's history and physical limitations, as well as after a careful physical examination and review of medical records, I have come to some conclusion concerning his ongoing level of physical impairment.

There is clear cause and effect relationship between the onset of his symptoms and the motor vehicular accident in question. The thorough diagnostic workup; however, revealed a rather significant pre-existing condition, that is the pseudarthrosis. The work-up as described was appropriate and the surgery performed was the surgery of choice for pseudarthrosis for the upper cervical region. It is my opinion; however, that the reason for the surgery was the pseudarthrosis. Had the accident not happened the pseudarthrosis would still be present. The appropriate treatment for the pseudarthrosis was the treatment that was performed. There is no cause and effect relationship between the presence of the pseudarthrosis and the motor vehicular accident in question. In other words, the accident did not cause this lesion. It was probably present since the early 1980's.

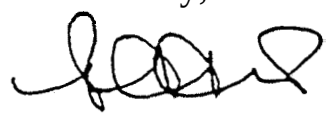
One could look at this accident as a somewhat fortuitous event. Although it seemed to be a minor type of collision had this been much more severe a permanent spinal injury may have occurred. This man was existing with a pseudarthrosis at the upper level of his cervical spine. Had he sustained a severe axial trauma, he may have had a permanent neurological injury.

A degree of objective findings with the type of surgery performed. He has the expected amount of loss of range of motion due solely to the surgery. In my opinion, he has objectively recovered. He could be vastly improved in a higher functional capacity had physical therapy been prescribed. This was suggested to the plaintiff to

bring up at the time of his next visit with Dr. Bohlman. Perhaps physical therapy could increase his physical strength and endurance.

In conclusion, it is my medical opinion that the symptoms as described were related to the accident in question. The pseudarthrosis; however, pre-existed the injury. The surgery performed was the appropriate surgery for the pseudarthrosis. Had the pseudarthrosis been detected absent the motor vehicular accident the same diagnostic workup, care and treatment would have been appropriate. The recovery has been good to date. The prognosis is favorable.

Sincerely,



Robert C. Corn, M.D., F.A.C.S.

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