Drs. Bell and Callahan
ORAL AND MAXILLOFACIAL SURGERY

Dr. Ronald H. Bell
Dr. Kenneth R. Callahan

Southgate Medical Arts Building
21100 Southgate Park Boulevard ♦ Suite 212
Cleveland, Ohio 44137-3099
(216) 475-2122

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Law Offices of
Richard J. Hartman
The 113 St. Clair Building
Suite 525
Cleveland, Ohio 44114

Attention: Mr. William H. Rider

Re: Marie A. Liapis

Dear Mr. Rider:

Please be advised that I have had adequate opportunity for oral, regional, radiographic, and historical examination on the above-named patient, Mrs. Marie Liapis, a 50-year-old homemaker. The examination took place in my office on 10/7/94. The examination was in regard to alleged injuries suffered by Mrs. Liapis to her temporomandibular joints as the result of a moving vehicle accident. Please be further advised of the following information which I believe to be germane to these alleged injuries.

I. History as related by the patient, with some marginal input provided by her husband who accompanied her to the office examination.

Mrs. Liapis states that she was involved in an MVA which took place on May 9, 1991. She was the driver, and she was restrained with both a lap and a shoulder harness. At the time of the examination, according to Mrs. Liapis, she suffered injuries to her neck, shoulder, and back. She denies having suffered any cuts, lacerations, or bruises. She denies having struck any object on the inside of the car. She stated, "Oh, no, I didn't strike anything because I had a seat belt on."

She drove home, but later presented herself to the Emergency Room at Fairview Park Hospital. Her chief complaints at that facility were those of "back, shoulder, neck, and lower back." I asked Mrs. Liapis at that juncture if she was having any jaw discomfort or jaw symptoms. She stated that she was not. This observation is corroborated by the Emergency Room Report, wherein there is absolutely no mention

made of any jaw or facial pain or jaw injury. Later she went to the office of her physician, Dr. Fitch, M.D. She recommended physical therapy. Her TMJs were asymptomatic at that time.

More than two and one-half months later, according to the patient, she made her first presentation to Dentist James Moodt vis-a-vis putative TMJ complaints. Mrs. Liapis states that she went there because "My jaws were clicking when I opened wide." I pointed out to Mrs. Liapis that clicking in the TM joints, by itself, does not constitute a pathologic condition. This is because it occurs in approximately 62% of the adult population at any given time. Nevertheless, she states that Dr. Moodt made a bite splint for her which she wore during sleeping hours thereafter. I asked if it gave her any relief. She stated that she was getting somewhat better gradually, and that the clicking began to improve. However, she adds at that juncture, her problem was not only clicking but "numbness." The numbness was, apparently, of the left face. Inasmuch as numbness is not, and has never been, either a sign or a symptom of temporomandibular joint disorder, I remain somewhat uncertain vis-a-vis the provenance of this alleged numbness.

On November 19, 1993 Mrs. Liapis was involved in a second MVA. Once again she was restrained with a seat belt and a chest and lap harness. Once again she denies having struck any object on the inside of the automobile, nor did she suffer any cuts, lacerations, or bruises. However, she returned to Dr. Fitch, who told her that she had aggravated her injury. Dr. Moodt told her the same thing. She believes that from that time to the present she has had no evidence of progress, but rather that her jaw symptoms, now expanded to include pain upon the act of chewing and headaches, has deteriorated. She adds that her jaw is stable as long as she is able to wear the bite splint. At the time of my examination, Mrs. Liapis was planning to have arthroscopic jaw surgery. Since my examination of Mrs. Liapis, she has had bilateral arthroscopic surgery done on her temporomandibular joints.

II. Review of the Charts and Records.

Inasmuch as this is a voluminous portfolio, let me present a brief distillate of salient products from the portfolio which I believe to be germane.

A. Mrs. Liapis was involved in a previous MVA which took place in September, 1986. It left her with a residual and persistent dull ache of the right shoulder, sharp shooting pain in the left cervical area, and chronic neck pain. She was being treated as late as 7/87 for this disorder. The MVA also produced right shoulder numbness, chronic neck pain, and difficulty in driving an automobile.

She also lists in a medical history questionnaire, "joint pain related to car accident" in March, 1987. The site of the joint is not disclosed.

B. The patient has had headaches since at least 1987, and in her prior charts at St. John and West Shore Hospital at a weight control clinic, headaches are listed as one of her physical problems on virtually every one of her charts throughout the Spring of 1987. She listed the headaches at one time as being sinus related, and she eventually had headaches which were so severe that they were awakening her at night. She described the headaches to ENT Physician, Dr. Howard Levine, as being in the right face and right cheek area. Again, I believe that these arose from the paranasal sinuses, but that did not turn out to be the case. The examination by Dr. Levine and x-rays of the paranasal sinuses on 1/6/93 showed normal sinus architecture.

Dr. Fitch noted on March 20, 1992 that the patient had pain in her face, and on 12/8/92, she complained of "ears hurt" and on 1/6/93, the patient complained that she had "facial pain and ears hurting." The patient complained of facial pain frequently after her two MVAs. However, it is evident that the patient complained of facial pain many times before her MVAs. She attributed her pain before the MVAs to sinusitis. However, there is good evidence that she did not have sinusitis. Further, pain in the ears is not diagnostic nor suggestive of sinusitis. Rather, pain in the ears is strongly suggestive of chronic temporomandibular joint disorder. It is my suspicion that Mrs. Liapis had this disorder prior to her MVAs.

C. At the time of her presentation to the Emergency Room at Fairview Park Hospital, Mrs. Liapis made no complaints vis-a-vis temporomandibular joint dysfunction or pain. Nor, in fact, did she do so for another two and one-half months after her MVA. Clicking was noted in June, but with no other symptoms. A diagnosis made by attending physician, Dr. Fitch, on 6/18/93, notes specifically That her two diagnoses were only those of acute cervical strain and back pain. that was more than one month after her MVA, and she was not having any TMJ symptoms. Further, the entire volume of charts from her physical therapists, Health South and Fairview Park Physical Therapy, makes a great number of entries in regard to back, shoulder, and neck problems. There was virtually no mention of jaw or TMJ disorder throughout the entire charting.

D. An MRI examination taken in April, 1994, shows normal TM discs, and normal temporomandibular joint apparatus. This finding is supported by tomograms taken by Dr. Moodt in July of 1993.

Equally significant, I believe, is an observation made by Dr. Moodt in a letter to Dr. Murphy on 7/27/94. Therein he comments on his own tomograms. He states, "There is no question that these radiographs do suggest the development of some arthritic change within the temporomandibular joints which certainly would have predated her initial accident." I believe that observation is accurate. I believe that she had osteoarthritic changes and TMJ symptoms which predated her initial MVA by a long time.

III. Oral, Regional, and Radiographic Examination.

As was previously mentioned, this took place in my office on 10/7/94. I believe the following observations are germane to Mrs. Liapis' current jaw status.

A. Her panorex x-rays show a suggestion of osteoarthritic changes in both TM joints. Panorex x-rays are not definitive, however, and I believe that Dr. Moodt's tomograms are more significant. They also show osteoarthritic changes which predated her first MVA.

B. When she opened, Mrs. Liapis was able to reach an interincisive aperture of 38 millimeters. This is within normal limits for females. Nevertheless, she presented so much guarding that I was unable to record any other measurements.

C. When I palpated her muscles of mastication, she had slight tenderness in the left masseter, but no other notable palpable muscle tenderness.

D. When I listened for clicks, I was unable to hear any. However, she declined to open again wide enough so that I could hear any clicks.

E. Nevertheless, although I was unable to complete my examination satisfactorily, it is my opinion that Mrs. Liapis was, indeed, having some TMJ pain on the left side at the time of the examination.

F. Two weeks after my examination was completed, Mrs. Liapis underwent surgery performed by Dr. Michael Hauser at Mount Sinai Hospital. His findings at the time of surgery were definitive. He discovered that the patient had significant anatomic internal derangements of both TMJs, including displaced discs and adhesions within the superior joint space. It was his view that the medical history indicates that the history and progression of her symptoms are consistent with traumatically induced TMJ internal derangement.

IV. Discussion.

Temporomandibular disorder (TMD) is a rather common disease. It occurs in females in a ratio of nine to one over males. Dr. Samuel Dworkin, writing in the Journal of Prosthetic Dentistry, 72:29-38, 1994, agrees that TMD is a chronic pain condition, sharing major characteristics of other common chronic pain conditions. He adds that these patients can be differentiated, not on the basis of observable organic pathology, but according to their ability to cope adequately with their condition. He states, "The majority of chronic TMD patients cope well, but a small proportion, the psychosocially dysfunction segment, shows a higher rate of depression and health care use." I believe this is true, and further that Mrs. Liapis falls under the aegis of a chronic pain patient. I believe Mrs. Liapis has had TMD symptoms and signs for a long time prior to either one of her MVAs, and that they went undiagnosed. She has had facial pain, ear pain, headaches, and pain behind the eyes, all of which are suggestive of TMD, dating back to her charts at least six years prior to either one of her MVAs.

I believe further that the primary source of injury and irritation to her discs and to her internal joint structures, including the production of adhesions, arises primarily and exclusively from her longstanding degenerative joint disease. This degenerative joint disease, which I note in concert with Dr. Moodt, is noted on his tomograms, and is a matter which he specified in his letter to Dr. Murphy in which he states, "There is no question that these radiographs do suggest the development of arthritic change within the temporomandibular joints which certainly would have predated her initial accident." I believe that is true as well. I believe the degenerative joint disease was the result of arthritic changes within the joint, and these arthritic bond edges irritated and damaged the internal structure of the TM joint and produced disc displacement. All of this took place long before either one of her MVAs.

Drs. Moodt, Murphy, and Hauser all believe that there is a causal relationship which exists between Mrs. Liapis' two MVAs and her eventual treatments for TMD. I believe, on the other hand, that there is no compelling support for such a cause-and-effect relationship. My doubts vis-a-vis causality arise from two separate and distinct areas.

There is good evidentiary material before me which suggests that Mrs. Liapis had chronic TMD prior to either one of her MVAs. She had a great number of symptoms which strongly suggest, as a cluster, a diagnosis of TMD. These include previously mentioned episodes of facial pain, ear pain, pain behind the eyes, and headaches. However, after her first MVA, she did not report any TMD problems. It was not until two and one-half months later that she first sought treatment. Specifically, one

month afterwards, her physician, Dr. Fitch, did not list jaw problems in her summary of symptoms. Two and one-half months is a long time between an episode of trauma and the first seeking of treatment. She had no symptoms during those two and one-half months. After all, injury to a jaw joint is rather like injury to any other joint. When you hurt it, it hurts right away and it hurts very badly. When we see football players on our TV screens who injure one of their joints, perhaps the elbow, or the knee, or the ankle, they roll about on the field in a great deal of distress. They do not report it or seek treatment two and one-half months later. I believe the time hiatus makes a causal relationship somewhat unlikely.

A bigger problem, in my dental opinion, in making a causal relationship arises from the fact that neither of Mrs. Liapis' MVAs produced any direct trauma. She was restrained in both instances, and she struck nothing on the inside of the car. Common wisdom tells me that you cannot injure temporomandibular joints in the absence of direct trauma. There is a plethora of research articles which have been published in the last few years which supports this avenue of common wisdom. I will only cite a few.

An internationally known expert, Dr. Daniel Laskin, writing in the Journal of Oral and Maxillofacial Surgery, Vol. 50, pp. 825-828, in an article entitled "Incidence of TMJ Symptoms Following Whiplash Injury" that he designed a series including 155 patients to analyze the development, if any, of TMJ pain and dysfunction following cervical musculoskeletal injury (whiplash). The study revealed, "No clinical evidence of a significant relationship between cervical musculoskeletal injury and the development of TMJ dysfunction."

Pullinger, writing in Oral Surgery, Oral Medicine, Oral Pathology, 71:529-34, 1991, in an article entitled "Trauma History in Diagnostic Groups" states that "It's been suggested that whiplash can produce disc and disc ligament trauma from indirect hyper-propulsion injury (jawlash)." However, the authors have found "traumatic tearing of the attachment in direct injuries to be exceptionally rare." The authors add, "We find it difficult to accept trauma-induced disc tears . . . in the absence of direct trauma to the jaws, and suspect a preexisting problem when . . ."

Finally, without belaboring the subject, Goldberg writing in the Journal of Cranial Mandibular Disorder, 4:131, 1990, states that his studies indicate that anterior disc displacement is an unlikely consequence of a motor vehicle accident without a preexisting history of dysfunction.

Finally, as a tangential observation, let me point out that the article by Dr. Laskin which states that indirect injury in the absence direct injury does not cause TMD was published by Dr. Moodt in his office newsletter and mailed to me.

As for Mrs. Liapis' prognosis, I believe that it is favorable. I base this opinion on Dr. Hauser's preliminary report. Arthroscopic surgeries on TMJs have a very high rate of success, however. I would lightly disagree with Dr. Hauser in two other minor areas. I do not believe that Mrs. Liapis' injuries are permanent. TMD is a self-limiting disorder. Jaw joints have a favorable quality of remodeling, and it has been my experience that most patients become symptom free after arthroscopy and sufficient physical therapy. Finally, I believe that under no circumstance will Mrs. Liapis ever need orthodontic treatment to correct her longstanding malocclusion. Orthodontics is not a treatment for temporomandibular joint disorder.

V. Summary.

Based on the evidentiary material before me, it is my dental opinion that it is difficult to make a reasonable cause-and-effect relationship between Mrs. Liapis' two MVAs and her longstanding bout with temporomandibular joint disorder. I believe her long-standing osteoarthritic changes which predated her first MVA caused her internal derangement. Further, I believe that in the absence of direct trauma, the likelihood of either one of the two MVAs producing internal derangements is slight. Finally, the time hiatus between her first MVA and her first seeking treatment, two and one-half months, during which time she had no TMJ symptoms, makes a causal relationship somewhat unlikely.

If you have further need of information, please so advise me.

Sincerely,

Kenneth R. Callahan, D.D.S.

Kenneth R. Callahan, D.D.S.
F.I.C.D., F.A.C.D., O.K.U.
Associate Clinical Professor of
Oral and Maxillofacial Surgery
Case Western Reserve University
Diplomate, American Board of
Oral and Maxillofacial Surgeons

KRC:mjm