A Tribute to Dr Daniel Laskin (1924–2021)

When you come to a fork in the road, take it!
—Yogi Berra

Others will tell you about Dan Laskin’s accomplishments in the rest of his multi-pronged career in the oral surgery field, but I wanted you to know how much he meant to me and to the development of the TMJ field over a period of 50+ years—and this clever quotation from the famous Yogi perfectly describes how that all began.

After graduating from the University of Illinois Chicago College of Dentistry and going into the Army, I was called in 1965 by a prosthodontist friend who knew of my dental school interests in the TMJ and in occlusion. He told me there was this young oral surgeon at UIC who just got a huge grant (a Program Project grant for 5 years, the largest amount ever awarded to a dental school, and renewed three times until 1984). This grant involved most of the scientific departments in the college and required a clinical component for studying patients with TMJ problems. My friend offered to introduce me to Dr Laskin to discuss the possibility of working in this new TMJ clinic.

When I went to meet him, I told Dr Laskin about my interests in the TMJ and occlusion (as a note, I had never heard the term “TMJ problems” or anything like it while in school or in the Army). I asked him how those interests might fit into his plans, and he looked me straight in the eye and replied: “I have pursued this grant because there are two things going on in the ‘TMJ’ world that disturb me, and I believe they need to be studied.” Those two things were: First, the fact that his oral surgery colleagues were performing a number of fairly radical surgical procedures like condylectomies (total and partial), condylar shaves, disc removals, sclerosing injections, and more; and second, that he did not believe the current thinking at the time about occlusal phenomena being the major cause of TMJ problems was correct. He had hired a full-time psychologist (Dr Daniel Lupton), and together they hypothesized that psychophysiological factors may be more important in causing such problems. Furthermore, Dr Laskin made it clear that there was little or no science underlying anything that was happening clinically regarding the diagnosis and treatment of TMJ patients. So I of course asked him how he proposed to study those issues, and he said: “We have to conduct a series of clinical research studies to challenge the existing concepts, and ultimately to develop more appropriate ones.” My immediate response was: “Sounds good to me—I’m in if you will have me.”

We also agreed on one guideline rule that persisted for the entire 20 years: no patient would receive any form of irreversible treatment unless there was a need for surgery to treat overt pathology within the TMJ.

I spent the next month or so reading up on the dental literature about TMJ problems, and it was pretty scary. There were only two books—one very good academic work written by multiple scientific contributors and edited by Dr Laskin’s mentor, Dr Bernard Sarnat (with whom Laskin, and later I, would be publishing new editions), and one work claiming that occlusal equilibration was the answer to all sorts of TMJ problems. There were quite a few articles, but all were similar in that they were either conceptual treatises and/or “scorecard” reports of how well patients were responding to various occlusal and surgical treatments. So, the next time Dr Laskin and I met, we discussed the need for conducting actual clinical trials with appropriate controls. I had read about the
placebo concepts coming into the medical field in the 1950s from Dr Henry Beecher, and we quickly agreed that we would start doing a series of studies with placebo controls (never before done in any branch of the dental field).

Naturally, we began by looking at some popular medications that were being used, and we soon learned that over one-third of the positive responses to them were due to a placebo effect. But then I proposed that we should try to make a placebo version of the most popular TMJ treatment—the occlusal splint. That device turned out to be helpful for over 50% of the patients, while a “real” splint was helpful for about 70%. Next, we conducted a fairly elaborate study of the procedure known as “equilibration”—but using only acrylic burs to pretend that we were making occlusal adjustments. After only two sessions, over two-thirds of those patients reported significant relief from their symptoms.

During this very active research period, we had the assistance of many oral surgery residents who were using our clinical population to do research for their MS degrees. Dr Lupton was producing very interesting findings from his studies involving psychometric instruments and clinical interviews with every patient. In 1969, Dr Laskin published his seminal paper proposing that the myogenous forms of TMD (which he called MPD at the time) were at least in part being produced by a complex combination of psychologic factors like stress and anxiety. He introduced the term “psychophysiologic theory” to describe this etiologic concept. Later, when the profession’s attention turned to arthrogenous problems like disc displacement, we had to react to the very quick emergence of disc-recapturing procedures using ARS splints as well as the disc-recapturing operations being proposed by his oral and maxillofacial surgery colleagues. Dr Laskin saw this latter group of procedures as being absurd, while I felt the same way about the splint methods—it seemed clear to us that a displaced disc was not going to stay in a “normal” position after such treatments, because the medial, lateral, and posterior attachments of the disc were no longer anatomically functional. Therefore, none of those procedures were ever carried out in our TMJ center.

And so this wonderful partnership of a genius oral surgeon and his younger GP acolyte continued until Dr Laskin left UIC in 1984 to go to Virginia. While no longer working together directly, we continued to publish papers based on the long-term data from UIC and on a number of other topics over the years. Our 15-year follow-up study showed that most of the patients who had responded favorably to our initial treatment (regardless of whether it was placebo or “real”) continued to do well, but of course, there were a significant number of either chronic nonresponding patients or those with fluctuating symptomatology. Fortunately, the TMJ field had grown by this time to include a number of excellent researchers and clinicians working in other centers around the world, and so these problems of nonresponse and chronicity became more widely studied. In 2000, Dr Laskin and I published a paper in which we proclaimed that the TMJ field was moving from the dental arena into a more medical arena, and indeed, that is where things stand today. The OPPERA studies conducted earlier in this century built upon this premise that TMDs were a group of potentially complex disease entities, with a combination of genetic and environmental factors contributing to their onset and persistence.

So, in closing, I want to thank the editor and publishers of this journal for allowing me to give readers just a brief glimpse of how things can happen when the stars align, when you work hard, and when your leader is an incredible human being with a first-rate mind and with great skills in directing the work to be done. I will miss Dr Dan Laskin a lot, but his memory will surely live on within the TMD community.

Charles S. Greene, DDS
Clinical Professor Emeritus
University of Illinois Chicago College of Dentistry
Chicago, Illinois, USA