



Lisa Schmidt

TMJ TOTAL JOINT REPLACEMENT PATIENT

Before TMJ surgery

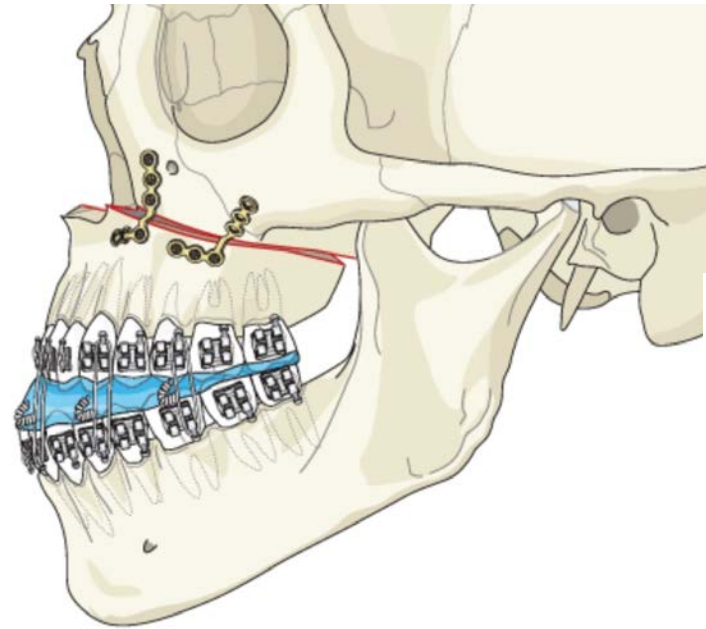


My TMJ Journey

It all started when a Dentist treated me with a dental splint and locked my Jaw

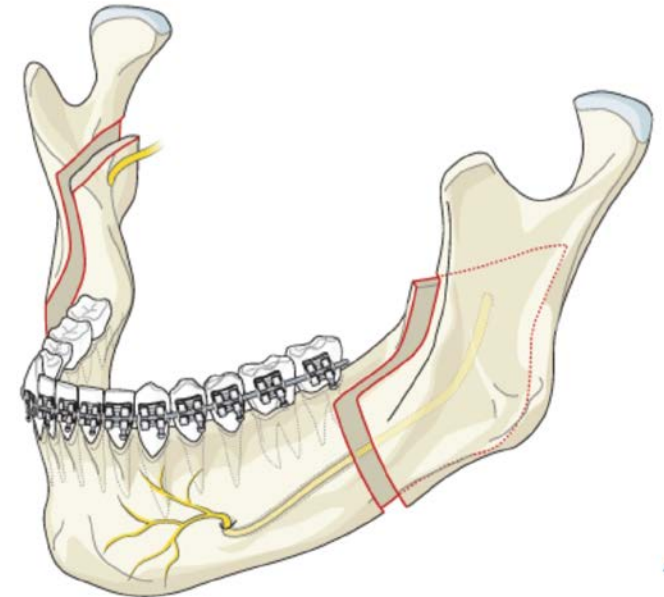
► Then came 12 surgical events

- 2nd Le forte
- arthroscopic
- Discectomy
- upper and lower orthognathic
- Total Joint replacement
- 2 revisions
- TJR removal
- Distraction Osteogenesis
- 3rd Le Forte
- 2nd TJR with nickel free joints
- sliding genioplasty



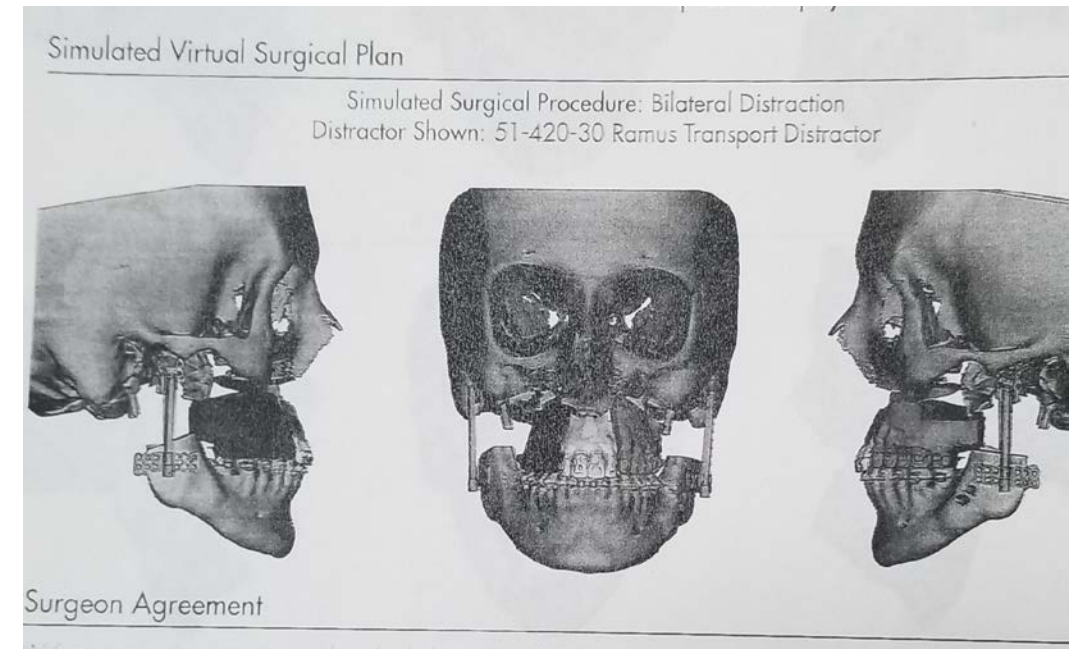
Le Forte

Orthognathic Mandibular Advancement



TMJ Nightmare

- ▶ 2015 I developed swelling, a bite change, and the pain increased
- ▶ May 2015, the surgeon removed my TMJ implants leaving me jointless
- ▶ January 2016 Distraction Osteogenesis to regrow condyles and Le Forte
- ▶ 1 week Post-Op surgeon said he needed to move the hardware because the placement was wrong
- ▶ July 2016 Le Forte procedure redone and Distraction Hardware removed
 - ▶ Screws in orbits
 - ▶ Turning Hardware in neck caused Oropharyngeal Dysphagia

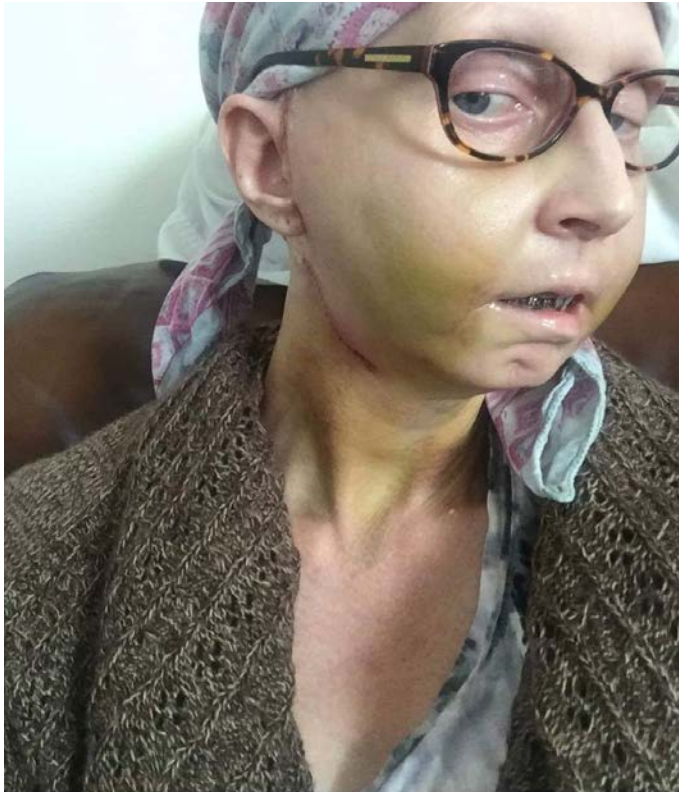


Digital surgical planning of Le Forte (upper jaw) and Distraction Hardware

Distraction Osteogenesis Photos



After the July 2016 surgery



Swelling and bruising from Le Forte and removal of Distraction hardware. Soon after this surgery my bite re-opened.

Before Total Joint Replacement 2017



Jointless, scarring from
Distraction surgery



X-ray showing the anterior
open bite (jointless)

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- A diagram of a human mandible (lower jaw) showing a lingual arch appliance. The appliance consists of a yellow wire arching behind the lower teeth, connected by four gold-colored circular components (likely buttons or bands) attached to the lingual surfaces of the premolars and molars. A small yellow arrow points to the wire near the premolar area.

Comorbidities Before TMJ Implants

- ▶ Migraines
- ▶ Asthma
- ▶ Ehlers Danlos Syndrome
- ▶ Hypothyroidism

Comorbidities After TMJ Implants

- ▶ Chronic Pain/Facial Nerve Pain/Neck Pain
- ▶ Migraine Headaches
- ▶ Autonomic Dysfunction-Running Nose and Watery Eyes
- ▶ Ears- Vertigo, Tinnitus, Permanent tubes due to Eustachian Tube dysfunction
- ▶ Oropharyngeal Dysphagia (swallowing)
- ▶ Obstructive Sleep Apnea which then caused a Right Bundle branch block
- ▶ Chronic Fatigue
- ▶ Bite Problems
- ▶ Autoimmune Problems (alopecia Universalis, hypothyroidism)
- ▶ Malnutrition caused gallbladder disease due to rapid weight loss from being wired shut
- ▶ Severe Gum recession and teeth have root resorption from braces and being wired

Impact on Family and Friends

- ▶ Chronic Fatigue
- ▶ Intimacy
- ▶ Cooking and Cleaning is difficult
- ▶ Trouble Concentrating
- ▶ Canceling Plans with friends hurts relationships
- ▶ Due to my limitations, Family activities are limited by type and scope
- ▶ My husband had to drive me 10 hours to take care of my gallbladder because the local hospital was afraid to intubate me.
- ▶ My career was cut short at the age of 30
- ▶ We are limited to where we can live due to my medical condition.
- ▶ Out of pocket cost of 4 orthodontic treatments (required for surgery) and periodontal treatment after braces

Ethical Concerns

- ▶ AAOMS Code of Ethics section G.1.08.A6

“Oral and maxillofacial surgeons who wish to serve as expert witnesses must not do so in cases for which they also served as one of the patient's treating doctors. This qualification does not preclude a treating oral and maxillofacial surgeon from serving as a fact witness testifying from firsthand knowledge about the condition of a patient and the treatment provided. If during the course of testifying the fact witness is asked his or her opinion about a particular matter, it is appropriate to remind counsel that the witness is not testifying as an expert or opinion witness. Changing this code of ethics will force Surgeons to be more conservative in their treatments.”

Chaos and Controversy in Care

- ▶ “TMD patients seek treatment from a broad array of differing professionals. This is a result of the uncertainty and controversy that abounds in this field and the failure of therapies to address the pain and dysfunction that accompany this condition.”¹

¹ see <http://mdepinet.org/wp-content/uploads/TMJPatientLedRoundTableWhitePaper.pdf>

A need for Guidelines

- ▶ The TMJ patient led roundtable looked at 24 organizations proclaiming to diagnose and treat TMD. Only the AADR, AAOP, and AAOMS had published guidelines
- ▶ TMD is a complex medical problem that needs a multidisciplinary approach that is Patient Centered.
- ▶ A Multidisciplinary team might consist of Primary care, Internal Medicine, Otolaryngology, Dentistry, OMFS, Pain Medicine/Anesthesiology, Rheumatology, Neurology, Sleep Medicine, Allergy and Immunology, Psychiatry, Genetics, Physiatry, and Ancillary services such as Nutritional Counseling, Speech Therapy, and cognitive therapy.
- ▶ The care team needs to be patient centered and coordinate care

Every Multidisciplinary team needs a Fur Therapy Support Team



Schmidt's Law

“If You Mess With A Thing Long Enough, It Will Break.”

Questions I have for Researchers

- ▶ Research between the medical and dental communities should be collaborative and not siloed
- ▶ Ideas for Funding sources (Device manufacturers, AAOMS, University Medical Centers, Doctors, and Dentists)
- ▶ Questions for Research:
 - ▶ Does having Asthma and/or allergies make a patient more prone to metal allergies?
 - ▶ Why do some patients develop biofilm infections while others do not?
 - ▶ Does a positive HLA B27 test make a patient more likely to have failed TMJ surgery or failed TJR?
 - ▶ Why do many patients that have TJR develop autoimmunity?
 - ▶ What Genetic testing should be done to determine a successful outcome? i.e. Ehlers Danlos Syndrome
 - ▶ Does this patient have Risk factors for developing CRPS?
 - ▶ How does long term metal exposure affect the patient's health?
 - ▶ How do hormones impact this condition? Patients are predominately women.
 - ▶ There are so many other questions to be asked.

Conclusion

“Science is not about Status Quo. It’s about Revolution.”

-Leon M. Lederman (Experimental Physicist)