REFLECTIONS ON THE HISTORY of OTOLARYNGOLOGY in MICHIGAN

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One hundred years ago, in April 1910, after a small organizational meeting, a call went out to all otologists, rhinologists, laryngologists, and physicians interested in pulmonary diseases to a meeting at the Detroit Club for the purpose of affirming an Otolaryngology Club. The response exceeded expectations. The original name chosen was the Detroit Otolaryngological Club, but in about 1960 in a bold effort to go statewide, the name was changed to The Michigan Otolaryngological Society.

There are several ways to write about history. One is to relate the biographies of early founding members. Three of those who were at that early dinner have interesting histories: Dr. Roy Bishop Canfield, Dr. Burt Shurly and, Dr. Emil Amberg.

Dr. Roy Bishop Canfield 1874-1932

In 1904, Dr. Canfield followed two doctors, James Fanning Noyes and George Frothingham, Jr., as Professor of Ophthalmology and Otolaryngology in Ann Arbor. He was the first to separate ENT from ophthalmology.

It was repeatedly noted that those who had billed themselves as O.and O specialists had concentrated on the eyes. Some men stand out because of their professional stature. "Bishop" as he was called was one of them. Our records indicate he was the Vice-president of the Detroit Otolaryngological Society in 1911, but he did not serve as President.

In Dr. A. C. Furstenberg's history of the Department, he says, "It may be said of Dr. Canfield, he was one of the founders and chief builders of modern Otolaryngology in Michigan from the point of view of pedagogy and practice." Dr. Furstenberg also noted the operating space allotted to ENT surgery was a closet under a stairway. in the contagious diseases building. There was space only for the patient, anesthetist, and surgeon. The nurse stood in the hallway and passed the instruments through the door into the room. Note there is no mention of assistants.

In 1907, Dr. Canfield appealed to the medical faculty for funds to construct a proper building for eye, ear, nose and throat cases. After a sum of $60,000 was considered, plans for a three story building (plus basement) were submitted. Operating rooms, space for fifty-three patients, waiting and examining rooms, offices, laboratories, and living quarters for interns and residents were all provided. The projected building cost was $25,000 It should be noted a drill for ear surgery was part of the equipment wish list, and by 1911 laryngectomies were done in the building.

Dr. Canfield did a great deal of consulting in Detroit (where the patients were) and he was asked by Henry Ford to treat his son, Edsel's, mastoiditis. Surgery became necessary and Mr. Ford insisted it be done at their home, Fairlane. This required the delivery of an operating table, surgical equipment, nurses, anesthesia, etc. to the home. All went well, but when Dr. Canfield submitted a very high bill, Mr. Ford became furious and then built his own hospital, nursing school, laboratories, hired doctors for a salary, and charged fixed uniform fees. Thus, we can perhaps thank Dr, Canfield for the Henry Ford Health system.

After one of his late night consultations in Detroit while hurrying back to AnnArbor, Dr. Canfield fell asleep at the wheel, drove off the road, hit a tree, and was killed. He was fifty-eight years old.

He teaches us about hard work, administrative ability, driving and perhaps humility.

Dr.Burt R. Shurly 7/04/1871 - 10/19/1950

Dr. Shurly comes at us from three directions; patriot, physician, and educator. As a patriot, he was proud to share his birthday with our country's. He served in three wars. During the Spanish-American War, he answered the first call to arms and served as pharmacist mate aboard the USS Yosemite. He did not have regular sick call. Rather, when any sailor felt the need he was able to find Dr. Shurly and secure help. Afterwards the entire crew was awarded Distinguished Service Medals. During WW I, he organized the 36th Base Hospital (France) composed of physicians and staff from Harper Hospital and he received the French Legion of Honor. This unit was reactivated again during WW II in Italy.

An obituary records he graduated from the Detroit College of Medicine in 1895 . He then went to Europe to study, returned to Detroit to practice, and joined the St, Mary's staff. He established an ENT clinic and remained on his school's faculty. We all volunteered as teachers in those days until Wayne became a State University in the 1950's.

Once, when the school was in financial distress, Dr, Shurly purchased it and carried it along until he was able to give it back to the city. Dr. Shurly was a founding member of the Detroit Otolaryngological Society and was in line to be president in 1917, but was prevented by the war.

However, it was in education that Dr. Shurly most endeared himself to Detroit. In 1927, he was elected to the Board of Education. During his tenure, programs were developed which provided hot lunches, chest x-rays, eye and hearing tests (with free glasses for the needy), orthopedic exams, endocrine clinics, and special schools for education of epileptics, the deaf, blind, and tubercular. He also pioneered pre-induction military training in high schools during wartime.

He was so highly regarded that on the day of his funeral the entire school system was given the day off to attend. Newspaper events of the day are preserved, and are still very touching.

He teaches us patriotism, to be hard working, and to work for the greater good.

Dr, Emil Amberg 5/1/1868-to 4/10/1948

Dr, Amberg was born in Santa Fe in the New Mexico Territory. He graduated in medicine from the University of Heidelberg, Germany, then interned and did graduate work at the University of Berlin and the University of Vienna. He followed with another internship during 1896 and 1897 at the Massachusetts Eye and Ear Infirmary in Boston. Intending to start practice in Chicago he got off the train and walked up Michigan Avenue but the winds were blowing from the stockyards in his direction so he returned to the station and boarded the next train for Detroit. Here he was the first to do straight Otology, beginning his practice at Harper hospital in 1898.

As the story goes, when he applied to the Trustees at the hospital to establish a section of Otology in the Department of Otolaryngology they asked, "Why? We give you all the beds you need and you have your own operating room."

Dr. Amberg responded that he was aware a section of Proctology had been formed in the Department of Surgery for Dr. Louis J. Hirschman, and since we had only one rectum but two ears he deserved consideration. With such reasoning, he could not be denied. Records indicate he was secretary of the ENT group for its first five years when they relented and made him president.

However in 1909, Dr. Amberg married the scion of a wealthy family, Ms. Cecile Siegal,. and for this or simply the fear of germs, he lost heart doing surgery and faded from the scene. It is hard for us now to understand the anxiety many men had about our work, but without immunization, antisepsis, and antibiotics, the possibility of acquiring infection was real. One physician sterilized his money before he left the office. Another refused to touch elevator buttons or public door knobs. One of our professors had a shower built in

his garage where he took a shower and changed clothes before he went into the house. The lesson here is the importance of good training and a balanced approach.

Perhaps my own choosing of Oto-Rhino-Laryngology as a specialty was predestined. My mother's most oft told story involved taking me at nine months, cyanotic and suffocating, to a "downtown" specialist who lifted me up by my ankles and with a sharpened finger nail in my mouth lanced a retropharyngeal abscess. When the blood and pus stopped draining from my mouth and nose, he lay me back on the examining table pink, asleep, and cured. But it did not end there. At five there was a tonsillectomy and adenoidectomy.

At twelve there was x-ray therapy for adolescent acne, which created ozena and several basal cell carcinomas of my face. By fifteen, there were weekly trips again downtown to have my nose packed with tampons and soaked in argyrol for chronic sinusitis. This ended abruptly when I entered the Ann Arbor student clinic armed with a letter for Dr A.C. Furstenberg describing the treatments. He read it shrugged, and handed it back to me with the admonition, " Kid, I don't do this sort of crap."

Meanwhile, my future wife was having her own childhood ear trauma. In spite of a T and A and several ear drum lancings, done at home without analgesia or sedation, as her father held her and her mother hid in another room. Joann ended up with a mastoidectomy and a week or two in the hospital. Her memories of that pain and experience linger still.

It has seemed to me that, before the advent of immunization and antibiotics, those who would undertake ear, nose and throat work must have spent their days wallowing in the slime, blood, and pus of abscesses; and the drainage of throats, sinuses, ears, mastoids, and tracheotomies for diphtheria and croup. All of this has changed during the eighty- four years of my life time..

Stories abound of the "old days". One enterprising physician built his own hospital on Adams street downtown, and his career upon "five dollar tonsillectomies". Parents would drop their youngsters at the hospital. He would do the procedure. Then the child was returned, still sleeping, and deposited in their car. Thus, the back seat of the family auto became the post-operative recovery room. If they bled or had trouble, no matter. Instructions read they were to go to the nearest hospital emergency room. Generations of residents and interns were thus trained to staunch bleeding.

Another physician was so busy, he hired an immigrant doctor to do mastoid repacking and dressing changes on Monday, Wednesday, and Fridays on the east side of Woodward Ave. and on Tuesday, Thursday, and Saturdays on the west.

Yet another, perhaps apocryphal, story involved Dr.James Milton Robb, then professor and also chief at Receiving Hospital. A circus which included a band of Gypsies came to Detroit. One of their children had swallowed a coin that failed to pass. The good doctor took him to the operating room and removed the coin via esophagoscopy. When the family balked at paying the bill, Dr. Robb gathered up the child and headed for the elevator. The family asked, "What is going on?" He said, "I am putting the coin back where I found it." One of the women reached into her voluminous skirts, removed a wad of money and promptly paid his bill in full.

Major changes began during the early 1930's, and soon came in a rush which continues still. Everyone then worried ENT was a dying specialty, but nothing was further from the truth.

I suspect unless you actually lived through a community's epidemic of poliomyelitis, it would be difficult to understand the abject fear gripping the people. Silently the disease

spread; first among the children. However, before long adults were engulfed also, mostly within households. Seemingly attacking willy-nilly yet, sometimes all in the house. It spread through a community like a wave. It began as a simple Upper Respiratory Infection. which did not let go. Next it weakened and hurt and paralyzed whole muscle groups. When the virus entered through the adenoid area, the cranial nerves were affected. This shut down breathing, talking, and living. Needless to say the entire community also shut itself down, too. Swimming pools, sporting events, social gatherings, were all abandoned, as hospitals became filled and doctors and clinics were overwhelmed . I have lived through two such epidemics in Detroit, 1938 and 1952-53. In 1952 , nearly 58,000 cases were reported, 3,145 deaths and 21,269 who were left with mild to debilitating paralysis.

Actually the Kenny Treatment of the time might have been construed as further torture. Moist, very hot woolen compresses were applied followed by massages, then by painful resisted exercising. All of this was an attempt to preserve the readiness of the muscles to accept re-enervation if and when it occurred.

Mercifully, Dr.Jonas Salk's vaccine introduced in 1955 eliminated this threat to the city, the country, and potentially the world.

The advent of D.P.T. (diphtheria, pertussis, tetanus) vacinations. and now polio and measles immunizations were soon followed by the antibiotics:

sulfanilamide (1930):was first used for topical wound antisepsis. These analine dye derivatives soon were available to give orally.

Penicillin discovered by Alexander Fleming in 1932, was in common usage by 1944 during WW II; Streptomycin (1940), touted as cure for tuberculosis, was countered by mutations of the bacillus and gave way to dihydrostreptomycin Aureomycin and the tetrocyclines, (1950's); and methacillin (1950) all added to our armamentarium. These have all led to "designer Antibiotics" which are created to cope with the ability of microbes and viruses to mutate.

AZT was the first of the retroviral agents. It was developed at Wayne State University by Jeff Horowitz in 1987, and now in triple combination therapy has stopped the progression of HIV-Aids.

These abilities to control infection have further resulted in our opportunity to look elsewhere to do good. Abundant areas have presented themselves.

Otology was the first fertile area: Dr, Julius Lempert in NYC devised a way to by-pass the oval window in cases of Otosclerosis. His fenestration operation gave serviceable hearing to a generation of the deafened.

Dr. Samuel Rosen, also in New York, re-directed our attention to the oval window, and his mobilization surgery returned many otosclerotics to normal hearing.

Drs. Harold Schuchnecht at Detroit's Henry Ford Hospital and Dr. John Shea in Memphis taught us to replace the stapes with prosthetics, and the patients did even better even longer.

Drs. Howard and William House in Los Angeles demonstrated we might help patients with Menier's vertigo by fenestrating and shunting the labrynthine fluids from the horizontal semicircular canal.

And now our ability to stimulate directly the nerve endings of the cochlear spiral ganglion is perfected and awaits only more miniaturization. We expect someday an electronic device which will individually stimulate each of the eighty thousand nerves of the cochlea.

Even so, at luncheon the other day with Dr. Edwin Monsell, a modern research, teaching, and operating otologist, who works at Wayne State school of medicine, I realized that during my nearly twenty years of retirement, the middle and inner ears have continued to understand much better how those inner and outer hair cells, the pillars and

the tectorial membrane all combine to conduct, amplify and discriminate sounds. Also we

u understand better how to diagnose and treat skull base tumors.

This understanding of neurosensory hearing loss, also now divides into many different definable areas: inner and outer hair cells, endolymphatic pressure changes, otolith problems, and auto immune abnormalities, etc,

Chasing acoustic neurotomata has led us into the new area (previously much neglected) of the skull base. With its own fellowship and training programs. Research here has also led to differentiation of these tumors by their genetic alterations.

One cannot help but wonder what Beethoven and Smetana might have created were they alive and hearing today.

Laryngology

The recent development of vaccines against viruses which cause human papillomata are an important weapon against these pre-malignant conditions.

Studies of the voice; its function, mechanisms, and education requires special courses, and physician education.

Similarly, Cosmetic Surgery has burgeoned into its own specialty. The American Board of Facial and Plastic Surgery has added face lifts, breast augmentation and reduction, "'tummy tucks" into its training.

Allergy, Pediatric Otolaryngology, Facial Trauma, Audiology and Hear Aids have each benefited from advances in knowledge and technology.

WSU Otolaryngology Professors

Dr. James Frothingham Eye and Ent

Dr. J.M. Robb ENT

Dr. Wadsworth Warren

Dr. James Croushore

Dr. Arthur Hammond

Dr.Jan Beekhuis

Dr. Robert Mathog

Uof Mich Professors

Dr. A.C. Furstenburg

Dr. Walter Work

Dr. James Maxwell

Dr. Charles Krause

Dr. Gregory Wolf

Dr. Carol Bradford

For the last thirty-five years, the Otolarygology - Head and Neck Surgery Department at Wayne State Medical School has been defined by Professor Dr. Robert Mathog. He arrived in 1977 as a graduate of the then new Teachers Program of the Academy of Otolaryngology. The department has flourished under his leadership. Over a hundred-twenty residents have graduated from the program and entered practices throughout the country. Indeed about twenty five percent of them have remained in academia and pepper the nation as professors. The fellow staff he gathered is exceptional, Dr. Edwin Monsell in otology and skull base surgery, Dr. John Jacob in head and neck surgery and oncology. Drs. Dennis and Marian Drescher in research. Dr. Marunick in Oral Surgery and Dr. Michael Carron and Dr. Jiancarlo Zuliani in Cosmetic surgery.

We realize there is no conclusion to the writing of history, as it is itself a continuum which will outlast us all. In my lifetime of four generations, we have progressed from a sharpened (some say jagged) finger nail to micro lasers. From cowering and hiding during epidemics to designer antibiotics and immunizations for diseases which have not yet developed, from macro excisions to micro radio and cathode ray extirpations, we can look

forward to a requiting and exciting future.

Obviously, each historian must identify an endpoint. For surgeons and teachers there are two. One is when we stop practicing. The other when we cease communicating. Two men have written on these matters. Both had significant medical careers, Dr. William Osler and Dr. Wilder Penfield. Dr Osler concluded few scientists make significant scientific contributions after the age of sixty, and Dr. Penfield mercifully gave us until sixty five. Each finished his time practicing at McGill Medical College in Canada at their appropriate ages and spent the balance of their time as Scholars at Oxford College.

Interestingly, Dr. Harvey Cushing's two volume biography of Dr. Osler devotes six hundred eighty-five pages describing his life before Oxford and six hundred eighty-six pages about his contributions as a Don.

I found that very reassuring!!

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