

## **Gestational Time (1940-1950)**

In the pre-war World War II era when pediatrics was struggling through its gestation period, pediatrics was a sub-branch of general practice and internal medicine. There were only four pediatricians in the Fresno area: John M. Frawley, MD, Charles S. Mitchell, MD, Raymond Van Wagenen, MD, and J. Edward Young, MD. A lot of time was spent preparing formulas since there were none available commercially. The pediatric patients with difficult medical problems were sent to the universities in Los Angeles and San Francisco. There were no sub-specialties. There was no Valley Children's Hospital. Hospital care pediatrics was done in separate wings of the general hospitals. All equipment and laboratory procedures were aimed at the adult level so that blood specimens required 10 ml per test, and we had to make do with adult needles for spinals and IVs, etc. The pediatric offices were usually in downtown high-rise buildings, and there were no parking lots.

## **Late Gestation (Late 1940s and very early 1950s)**

After the War, many physicians, including eight to ten pediatricians either entered or returned to practice in Fresno. Most of the pediatricians' offices were on the north side of town in and around the Tower District. This area was between Community Hospital and Saint Agnes Hospital, which then was on North Fruit Ave. When a rare Cesarean section was performed, a pediatrician was called to take care of the baby. It is of interest that the pediatricians attended surgery, but they wore street clothes under their gowns. Sulfa drugs and Penicillin became available. Tetracycline, Chloramphenicol and Erythromycin were then developed. Only after using these drugs did we find out the serious side effects of permanent tooth staining with Tetracycline and aplastic anemia with Chloramphenicol.

Also during this time, pediatricians started doing exchange transfusions for Rh incompatibility. This condition was common enough that we were doing at least three or four transfusions per week. They were done in the newborn nurseries at Fresno Community Hospital, Saint Agnes Hospital, or Valley Medical Center.

Most of the severe, contagious diseases were managed at Valley Medical Center. Each summer Fresno would have an epidemic of poliomyelitis with 60 or more cases per year. Of these, usually 10 or more would develop pulmonary paralysis that required the Drinker respiratory iron lung. We were just starting the use of the Sister Kinney hot pack treatment. In the summertime, "polio" was a scare word. Parents often kept their children home, out of the theater, and away from swimming pools. Other infectious diseases also were common; these included red measles, German measles, scarlet fever, chickenpox, meningitis and ear infections. Surprisingly, most of the ear infections of that time were completely well in five to ten days.

The only immunizations routinely given were the DPT series, smallpox vaccination and frequent tetanus boosters. It was not until after the Korean War that a rational approach for tetanus boosters was developed. We had just learned the importance of potassium and started to use potassium intravenously in severe diarrheal disease. Colic was common and severe, especially in the older Armenian immigrants. Pablum was the mainstay of baby food. Doctors had just learned

of the details of hip dysplasia. The Smyth-Caffey syndrome of cortical hyperostosis and the so-called Paul Whiteman facies were seen.

Most doctors, except dermatologists, treated nasal allergies only with Benadryl or Pyribenzamine and eczema only with diet. Asthma was extremely difficult to manage as we only had ephedrine and epinephrine. But a new drug, theophylline, became available and, with it, new products like Tedral or Marax; these were of great help. Of note during this time, pediatricians made frequent home calls.

In the early 50s we were surprised by an epidemic which was first thought to be meningitis. This epidemic occurred in July primarily in children less than one year old. It presented with a sudden onset of fever, convulsion, bulging fontanel, and cloudy spinal fluid detected by lumbar puncture. The spinal fluid protein was high, sugar low, and the cell count of over 1,000 was mainly polys. However, all the cultures were negative and later viral studies showed that this epidemic was Western Equine Encephalitis. Many of the infants at that time had severe neurologic damage.

### **The Birth Process (1950- 1960)**

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In 1954, the Salk-killed-polio-vaccine immunization program was started. Doctors' children in Fresno were among the first to obtain Salk immunizations. An alarming revelation almost killed the program when some of the Salk-Cutter vaccine was found to be contaminated with live viruses; this contamination resulted in some cases of paralysis after the shot, but, fortunately, no cases occurred in Fresno.

### **The Toddler Age (1960- 1980)**

Valley Children's Hospital expanded during this time, adding another wing. Late in the period J. D. Northway, MD, became the first doctor to function as the Chief Executive Officer of the hospital. Also, pediatric subspecialists first entered practice in Fresno. These included Drs. Kenneth Jue in pediatric cardiology, Ernest Haws in pediatric surgery, and James Brunberg in pediatric neurology. Of note is that the hospital closed its formula room because so many commercial formulas were then available.

In 1961 an interesting "epidemic" in Fresno got national headlines with the cases of the poison pants. The first of these cases was that of a 10-year-old boy who was admitted to Valley Children's Hospital. He was diagnosed, treated, and discharged as having organic phosphate poisoning with unknown contact. He improved only to be found to have had a recurrence when he was rechecked one week later. During a test, his jeans killed a mosquito colony in an enclosure. Detailed investigation by the Public Health Department showed that his pants had been contaminated with organic phosphate in transport. Other patients with unusual symptoms were seen in physician's offices and emergency rooms. Warnings were placed on radio,

television, and in newspapers. In summary, some eight children had illnesses associated with wearing Husky size 10 jeans obtained at a surplus store. These jeans had been soaked in an organic phosphate compound from a drum, which had leaked while in the truck with the jeans.

Sabin oral polio vaccine became available in 1962, replacing the Salk killed virus vaccine injections. Through a massive combined effort of dentists, lawyers, bankers and pharmacists lead by Fresno County Medical Society physicians, over 250,000 Fresno County residents were immunized with polio sugar cubes at fire stations throughout Fresno County. We asked for a 25-cent donation with each treatment, but because of the generosity of those seen, we had a surplus of \$63,000. This surplus started the FMMS scholarship fund, which is still actively providing money for medical education.

In this period there were changes in our immunization programs. Smallpox was eradicated throughout the world, so we stopped giving smallpox vaccinations. A combination of measles, mumps and rubella immunization (MMR) injections helped decrease the occurrence of these three diseases. Now it is rare to see any of these and if a physician sees a parotid swelling, his first thought is that it might be AIDS.

Neonatology had its beginning locally when Dr. Jack Scott left pediatric practice and went to Stanford for specialty training with Dr. Phil Sunshine. He returned to open and head the first neonatology unit at Valley Children's Hospital.

### **The Elementary School Age (1980-1990)**

New diseases, including Kawasaki syndrome, were diagnosed. Sexually transmitted disease occurrence increased significantly in the pediatric age group. Teenagers were becoming sexually active and were having all the complications from this including teenage pregnancies, premature infants, AIDS, etc. Reyes syndrome came and went. Some of the previously seen diseases such as Smyth-Caffey syndrome and polio had disappeared. There was a decrease in the number of procedures previously done routinely by pediatricians. These included temporary tracheostomies, subdural taps and deep jugular vein phlebotomies. Many new developments appeared in rapid order. Total Parenteral Nutrition (TPN), Broviac catheters and oncology diagnostic techniques and treatment were among the first. Genetic fields expanded with dysmorphology diagnosis, amniocentesis and gestational diagnosis. Fetal surgery became a viable option. The use of temporary tracheostomies vanished, and the use of permanent tracheostomies developed for children with chronic central nervous system problems. Nissen funduplications and gastrostomies became more common procedures. Asthma management changed with the discontinuance of theophylline in most cases in favor of aerosol bronchodilators. Seizure medications such as phenobarbital were gradually displaced by other anticonvulsants.

Many genitourinary procedures such as treatment for ureteral reflux, meatotomies, urethral dilatations, retrograde pyelograms, and intravenous pyelograms essentially were no longer performed.

The use of new vaccines such as Hepatitis B and Haemophilus Influenzae Type B became routine.

Valley Children's Hospital opened first one and then a second off-campus emergency room facility. There was a huge drop in the number of private payment hospital pediatric cases and a corresponding increase in the number of government payment cases. These (Medi-Cal) patients were managed on the "resident service" by the UCSF pediatric residents assigned to Valley Children's Hospital. Private attending physicians oversaw their care.

Cesarean sections were still commonly performed, but post-Cesarean section vaginal deliveries now became accepted. The pediatrician's attendance at Cesarean section deliveries was felt to be needed less often.

An increase in the number of measles cases seen due to vaccine gaps was stopped by the increased use of Measles, Mumps and Rubella (MMR) booster doses. Pediatric endoscopy was introduced, and several laparoscopic surgeries became available. Residents lost their familiarity with how to prescribe home-made formulas. Nurses and phlebotomists took over the IV procedures. Across the street from the hospital, Valley Children's Hospital opened a hospice facility known as "Rotary House" which began housing about 70 patients per year. This hospice was used for long-term-care patients with chronic diseases such as cancer.

### **The Adolescent (1990 – Present)**

We are now being introduced to new concepts in pediatric care such as school-based and family planning clinics. Pediatricians are beginning to become triage specialists with referrals to a multitude of tertiary sub-specialists. As some of the contagious disease cases, such as H. Influenza meningitis in infants, become rare, a whole new spectrum of pediatric problems is taking their place. This includes sexually transmitted diseases, physical abuse, drug-exposed infants, 14-year-old mothers, learning problems, steroid use by weight lifters, trauma (from motor vehicle accidents, guns, et. al), and foster home care problems with frequent moves and abuse. Meanwhile, computer aided diagnosis and treatment, including the ability to send ultrasound images, CT scans and MRIs via telephone lines to central areas for tertiary specialists to interpret, has arrived.

There is a mushrooming of medical-legal problems. And there is a huge increase in para-professional help in legal, pharmaceutical and medical areas.

### **The Future**

#### **The Maturation of Pediatrics**

Looking through the haze of future time, we see increasing involvement of the pediatrician as a primary care physician in preventive medicine and in coordinating the care of our patients. This will increase personal satisfaction as we orchestrate the rhythms of the paramedical people and technicians to complement the intricate melodies of tertiary care subspecialists. This artistry will be necessitated by the increasing importance of capitated arrangements and emphasis on primary care. The patient base will continue to grow with the population demanding an increased complex coordination of technical awareness while ensuring that the individual caring and personal contact are not lost.

The increased communicative abilities and improved technical capabilities will increase the availability of specialized care to larger numbers of patients at less cost. Histories, findings and laboratory data of problem cases will be sent by satellite to centralized areas where tertiary diagnosis and treatment recommendations will be immediately available. This will continue to emphasize the need for interest and personal caring of the general pediatrician who will be assisted by paramedical people and technicians. With the continued maturation of pediatrics, we see confident, secure practitioners who grow with technology and become even more able to service the needs of the most valuable segment of our population.

**Welcome the future!**

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