**Pediatrics**

Pediatrics was an enjoyable rotation.

Lectures were given on how to examine a normal neonate. The Apgar score was stressed as well as how to resuscitate a newborn. We were demonstrated the Moro reflex and the stepping reflex that are present in all newborns. Bilirubinemia, or jaundice is common in premature newborns and needed to be treated with ultraviolet light or exchange transfusions to avoid neurologic injury. On our examination of newborns, we were taught to recognize orthopedic conditions. Some were obvious, like extra digits or a club foot, but the finding of hip dislocation was quite subtle. It would be important not to miss such a condition as treatment by splintage needed to be started early to prevent problems later. We were taught about development and how to recognize delay.

Congenital heart disease was common. The machinery murmur of a patent ductus was classical, and I remember when I first heard it. The commonest cyanotic congenital heart defect was Fallot’s tetralogy and these patients were easily recognizable by their dense blue color and their tendency to squat frequently. Squatting increased the resistance in the aorta allowing more blood flow to the lungs with improvement in oxygenation.

Much of our rotations were at Red Cross Children’s Hospital. This is an extremely busy hospital – it is probably the World’s busiest pediatric hospital. About a quarter of a million plus outpatients are seen here yearly.

One of the busiest areas of the hospital was the drip room established to deal with the epidemic of diarrheal disease that occurred every summer. Diarrheal disease is probably the leading cause of infant mortality in the Third World. Infants were brought in either by their mothers or ambulance. Those not requiring admission and intravenous hydration were given a packet containing glucose and a small amount of salt to which they were instructed to add water and then to give in large volumes until the diarrhea settled. A nurse instructed the mother on cleanliness to avoid spreading of the responsible virus or microorganism. Sicker infants were admitted initially to the drip room. The drip room was a large room about 25 by 7 yards. In the middle of the room was a long wooden table-like structure approximately 4 feet in height, approximately 4-foot-wide and running almost the length of the room. A vertical 8-inch plank bisected the structure along its length, and along each half other vertical planks, at right angles separated areas for each baby. Above the wooden structure ran a quarter inch wire to which hooks hung for the hanging of intravenous fluids. Along the walls were benches on which the mothers sat. The room had a sickly smell of diarrhea when one entered, but one soon got used to it.

This area of the hospital was largely run by nurses who were extremely experienced. A medical officer checked the babies about twice a day and admitted, more formally, the sicker children to the wards. The nurses were extremely proficient in the insertion of scalp IVs. Scalp IV’s were the preferred IV site because it was here that veins were more easily visible. An elastic band was placed around the scalp to inhibit venous return and to cause the veins to distend. A very small butterfly needle was inserted and held in place by a plaster cast, rather than tape. The plaster cast prevented displacement of the needle when the infant moved its head. Once the IV was in place it was connected to intravenous fluids which were hung to the wire. When the baby had been resuscitated and appeared relatively well the drip was disconnected, and the child discharged. While the babies were being resuscitated the mothers would deal with soiled diapers and be taught about cleanliness and nutrition.

Some of these babies had clinical signs of marasmus – protein calorie malnutrition, characterized by extensive tissue and muscle wasting. These babies were easily recognizable. Their weight was far below the expected weight as documented by growth charts. The skin was dry and there were loose skin folds. Areas normally containing fat, the buttocks and thighs, were shadows of their normal appearance. The children looked like photographs of those incarcerated in concentration camps; they looked like the photographs of children taken in Biafra during their civil war. The afflicted are often fretful, irritable, and voraciously hungry. If severe the children were admitted; others were managed by providing the mother with nutritional supplements.

Another form of very common malnutrition was kwashiorkor, an African word derived from Ghana, meaning "the sickness the baby gets when the new baby comes", reflecting that it commonly involves the older child when a new sibling arrives. The new sibling gets the mothers breast milk, which is rich in proteins, but the older child’s diet, is replaced by a diet high in carbohydrates and starches, but deficient in protein.

These children look deceptively healthy because of their chubby appearance and distended abdomens. However, weight and height are stunted. If examined the chubbiness may be due to edema. The hair is often sparse with a reddish hue and the liver is enlarged.

In the outpatient clinics, staffed by medical doctors, or general practitioners doing part-time session work, we were exposed to diseases that affected the poor and disadvantaged. Helminthic infections, or infestation of the gastrointestinal tract with worms, (round worm, pin worm and hook worm) were common. The most common skin diseases were scabies and impetigo, followed by abscesses, and the exanthema (measles and chicken pox).

Respiratory diseases were common. Sore throats, ear infections, asthma, croup and whooping cough were extremely common as was tuberculosis. Examination of these children was difficult; they invariably cried or screamed when a stethoscope was placed to their chest. We needed to listen between cries and gasps. The throat was examined momentarily between gasps. Some of the children were extremely ill and were treated with humidification and bronchodilators. Some required intubation and ventilation.

In my vacations back in East London, Kingsley and I spent days in the local hospital with local pediatricians. A very similar spectrum of disease was also noted.

The most popular pediatric lecture was on a Saturday morning at Red Cross Children’s hospital. These lectures were given by Dr. Mick Leary. He was a great teacher and basically reviewed the whole pediatric syllabus over a year.

During my 5th year I diagnosed acute glomerulonephritis in my eldest son. I had picked up the dark urine and anuria (the passing of only small amounts of urine) characteristic of the condition. He spent about a week in hospital. Later, after becoming specialized in Cardiothoracic surgery, I diagnosed encephalitis in my youngest son and held him while he had a lumbar puncture. His was a viral illness which fortunately recovered. Some of the teaching in pediatrics must have rubbed off.