



Contents lists available at ScienceDirect

# Journal of Pediatric Surgery

journal homepage: [www.elsevier.com/locate/jped surg](http://www.elsevier.com/locate/jped surg)



CAPS Fred MacLeod Lecture

## The Shrinking Landscape of Pediatric Surgery: Is Less More?

Riccardo Superina \*

Northwestern University Feinberg School of Medicine



### ARTICLE INFO

*Article history:*

Received 8 January 2018  
Accepted 1 February 2018

*Key words:*

Fred MacLeod lecture  
CAPS  
Landscape pediatric surgery

### ABSTRACT

The Fred MacLeod Lecture was given at the 49th Annual Canadian Association of Pediatric Surgeons meeting held October 5-7th, 2017, in Banff, Alberta, Canada.

© 2018 Published by Elsevier Inc.

### Contents

1. Surgery and the dawn of history . . . . .	869
2. "General" pediatric surgery . . . . .	869
2.1. Pediatric general surgery vs. subspecialty pediatric surgery . . . . .	870
2.2. Pediatric hepatobiliary surgery . . . . .	871
2.3. Regionalization and subspecialization within groups . . . . .	872
3. Proposed new rules for pediatric surgery training and practice . . . . .	873
4. Conclusion . . . . .	873
Conflicts of interest . . . . .	874
References . . . . .	874



Mr. President, members and guests, I am so delighted to be in Banff at this CAPS meeting as the Fred MacLeod-JPS annual lecturer. I do remember years ago when Dr. Simpson at Sick Kids, with whom I had

the privilege of training, talked about the initial investment to fund a visiting lecturer at this meeting. It's astonishing how that relatively small investment has grown and enriched these yearly meetings for so long. I also know that Arlene Ein and Jay Grosfeld helped to bolster the funding and preserve the tradition by an additional gift from the Journal of Pediatric Surgery.

When Erik invited me about a year ago in WOFAPS in Washington, he left the choice of topic wide open. I thought that to an audience of general pediatric surgeons, it would be more appropriate to talk about my personal views about the evolution in pediatric surgery that I have noticed in the years that I've been involved in this specialty, rather than focus on the narrower field of hepatobiliary surgery. I have seen the landscape of pediatric surgery shrinking, but I think this is an opportunity, rather than a limitation, for us to define some of the issues that face us as pediatric surgeons and derive solutions that are relevant and satisfying.

I am going to go on a little trip down not just my memory lane, but the memory of pediatric surgery. I will start from the beginning of

\* Box 57, 225 E Chicago Avenue, Chicago, IL 60611.  
E-mail address: [rsuperina@luriechildrens.org](mailto:rsuperina@luriechildrens.org) (R. Superina).

recorded history to trace the evolution of this discipline and see how we have arrived at where we are today. So it's going to take a while.

Go back to when you were first interested in pediatric surgery. For some of you that is not very long ago, for some of you, you may not even be here yet, but for others it's been a while since we had to consider about that. The things that attracted us to pediatric surgery in the first place may have been an affinity for the pediatric surgeons we encountered or perhaps it was a love of working with children. However, when I ask pediatric surgical applicants, the answer I get to that question (more often than not) is that they want to be part of the last remaining bastion of general surgery. The appeal of pediatric surgery is that it spans everything from head and neck surgery down to ingrown toe nails and circumcisions.

My attraction to pediatric surgery came from my encounter with two individuals at the Montreal Children's Hospital when I was a junior resident. One was Harvey Beardmore, the second was Tony Dobell. Harvey had a reputation as a fearsome examiner who left people quivering on the floor after he finished examining them. Harvey Beardmore was a very notable pediatric surgeon. He was the first member and first president of CAPS. He was president of APSA and he was an international figure – larger than life. He could eat more oysters than anybody I've ever seen at one sitting. Tony Dobell, was the coolest customer under pressure that I have ever seen. Tony Dobell defined pediatric cardiac surgery at McGill, and taught me the fundamentals of how to navigate through complex surgical procedures without flinching. He taught me that the secret to success in every operation was to understand the problem, understand the solution, and lastly, hemostasis.

When I graduated from general surgery I received Ravitch's textbook of pediatric surgery as a gift from my surgical mentors at the Royal Victoria Hospital. And when I read through that book I felt that I could become an expert in just about anything in that book if I tried. It was a truly empowering feeling which perhaps many of you also experienced after reading that book, cherishing its wisdom and breadth of knowledge.

## 1. Surgery and the dawn of history

When you look back, surgery starts in the dawn of history. The first elective surgeries performed appeared to have been circumcisions in Egypt. In 2400 BC, circumcisions were depicted in tomb carvings (Fig. 1). It is unclear whether they were performed as religious rituals, or done as punishments to prisoners or slaves.

Not surprisingly before that, most surgery was trauma-related. Pediatric surgery through history is marked by the fact that the preponderance of surgeons were not just pediatric surgeons, they were surgeons who treated both children and adults. In ancient times, surgeons cared for patients amazingly well – treating conditions one would never imagine were possible. In India, esophageal atresia was described. Colostomies were done for aganglionosis without any anesthesia. In China, Greece and Rome, the surgeons of the time spanned the full breadth of surgery. In the first illustrated book of pediatric surgery, by Serafeddin Sabuncuoglu (a Turkish surgeon) operations were illustrated ranging from circumcisions on boys of the royal family to descriptions of operations for hydrocephalus. Interestingly, ceremonial circumcisions on the Sultan's son were only allowed after the surgeon had practiced on several thousand commoners. Thus, experience counted even back then and outcomes may have been already related to the number of cases the surgeon had done. In those times, the boys went back to the palace for several days to recover from the surgery. I believe this is the first example of daycare surgery.

Ambroise Pare came along in the 16th century. He was primarily a military surgeon who was appointed by the king for his prowess in treating soldiers. But he also wrote a book about children with hydrocephalus, congenital dislocation of the hips, squints, anal atresia, urinary stones and more. He also described conjoined twins. And of course, his

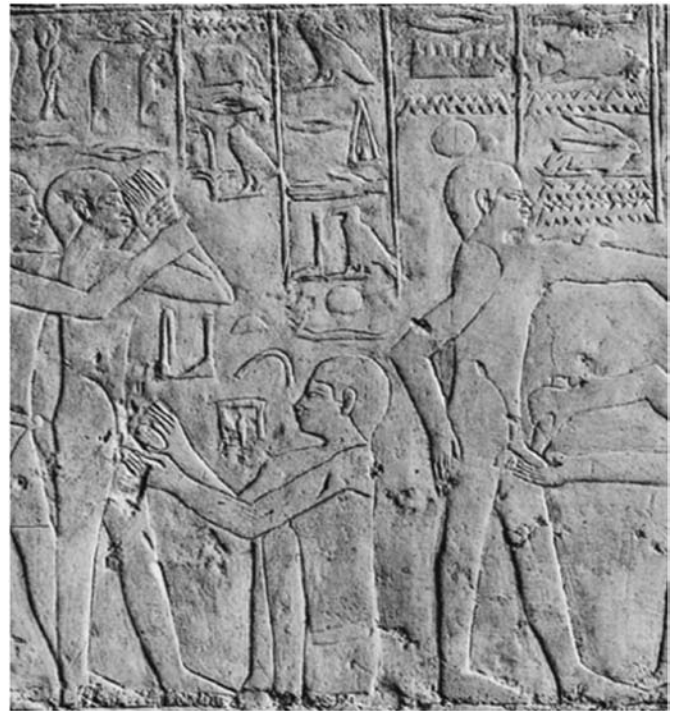


Fig. 1. Egyptian tomb carvings from 2400 BC depicting circumcisions.

remarks “Je le pensait, Dieu le guarit”, became the motto for our Canadian society of pediatric surgeons.

Peter Paul Rickham, the well-known English pediatric surgeon who was the chief of surgery at the Alder Hey hospital in Liverpool claimed that Johannes Fatio (1649–1691) of Switzerland, should be considered the first true pediatric surgeon. Fatio was a member of the barber's guild and he devoted an entire book to surgical afflictions of children. This rich tradition of generalism in pediatric surgeons started before Fatio, but was consolidated in him. He treated just about anything that came along in children: hypospadias, hydrocolpos, imperforate anus, gastroschisis, omphalocele and much more. He was the first surgeon to successfully separate conjoined twins. Unfortunately, he was rewarded for his efforts by capture, imprisonment, torture, and beheading. His head was displayed as a public warning to others who might disagree with the prevailing government.

The first pediatric hospital was in Florence, the “Ospedale degli Innocenti”, that opened in the early 15th century. It functioned for five centuries in the care of children. On its façade, the architect, Brunelleschi, had designed “rounds” that were originally left empty. Later on, they were filled with ceramic figures of children made by the Renaissance artist Andrea Della Robbia. If you look at them closely, they have a striking familiarity – they closely resemble the baby that is in the crest of CAPS with the outstretched hands (Fig. 2 and b).

## 2. “General” pediatric surgery

As one approaches the modern era, the concept of the ‘general’ pediatric surgeon in the 20th century remains intact. Dr. Bill Mustard at the University of Toronto may be the only person who has major operations named after him in two separate specialties. Not only was he an accomplished orthopedic surgeon with an operation named after him for transfer of the iliopsoas muscle to strengthen the hips in patients with polio induced weakness, but he also invented the famous Mustard procedure for blue babies for patients with single atria. In addition, he was also instrumental in perfecting the heart lung machine for cardiopulmonary bypass.

Download English Version:

<https://daneshyari.com/en/article/8810277>

Download Persian Version:

<https://daneshyari.com/article/8810277>

[Daneshyari.com](https://daneshyari.com)