

## Historical Perspective

The first half of this century was characterized in pediatric surgery by the advent of new surgical techniques designed to treat congenital defects.

This, of course, required a detailed description of the basic anatomy of each one of the most common defects including esophageal atresia, pyloric stenosis, diaphragmatic hernia, etc.

Thus, with relatively small effort, pioneers, giants of this century, made remarkable contributions in the field of pediatric surgery, which allowed the repair of those defects, integrating to normal life many previously unfortunate children.

After around 1950, there were few remaining congenital malformations that were not susceptible to surgical treatment in the field of general pediatric surgery. Therefore, the main advances in pediatric surgery, after that time, have been mainly related to the medical care of those patients subjected to surgery. These include:

- Parenteral nutrition
- Adequate management of antibiotics
- Progress in the knowledge of metabolic concerns of the surgical patient
- Monitoring
- Anesthesia
- Ventilatory support
- Miniaturization devices

All these advances work to the surgeon's advantage, allowing performance of surgical procedures in a calm, well-illuminated field, changing many of the previous urgent procedures into elective operations.

One of the few areas of pediatric surgery in which the knowledge of basic anatomy was still very limited, even in the 1980s, was anorectal malformations.

Since 1980 the approach of these defects through a wide posterior sagittal incision, with the use of an electrical stimulator, has allowed us to explore the basic anatomy of these defects in a detailed manner and also to establish important correlations between the external anatomy, the internal anatomy, surgical techniques, and clinical results.

Exploration in the above-mentioned way has been exposed to us an anatomic area that previously was a matter of speculation. Prior to this approach, the only access to these defects was either through the perineum, the abdomen, or a combination of the two.

Surgical procedures frequently involved blind maneuvers with the consequent risk of injuring important structures. The rectum was pulled down through a path that was assumed to be the right one.

These assumptions were based on a few anatomical postmortem dissections, which were hardly representative of the entire spectrum of defects, ignoring anatomic details that now are considered important.

In the 1980s, even in the face of the fantastic progress of medicine, sound surgical techniques are still crucial if adequate function is to be achieved through the correction of basic human defects. Therefore, we cannot underestimate the value of technically and anatomically sound surgery.

The conjunction of improved surgical techniques with progress in the medical care of the surgical patients has brought us to the present era in which we almost take for granted that children with different types of atresias, congenital defects of the heart, lungs, and gastrointestinal tract now survive, when properly treated in most American and European hospitals.

However, we are now learning that many times, after we have repaired a congenital defect, the baby still may continue to show signs or symptoms of organ malfunction and it is the patient's functional outcome that still remains our greatest challenge.

Facing these great challenges now requires exploring the very basic foundations of the problems to find adequate solutions. This requires a much greater effort for diminishing reward and progress. Thus, we are now privileged to live in the era of transplants, artificial organs, fetal surgery and manipulation of the genetic material.



It is our intention to inform people about anorectal malformations / imperforate anus in children, as well as sound approaches to non-surgical techniques that are required in helping patients manage post-operative incontinence and urologic, sexual and gynecologic problems throughout their lives.

## Contact the Colorectal Center at Cincinnati Children's

For more information or to request an appointment for the Colorectal Center at Cincinnati Children's Medical Center, please [contact us](#).