



Editorial

ENTERING INTO NEW ERA: PAEDIATRIC UROLOGY, NEONATAL SURGERY & PAEDIATRIC ONCO-SURGERY

Since its birth in 1980, Paediatric Surgery in Bangladesh has evolved from its inexperienced childhood to a confident youth being on the verge of seeing its offsprings at present time. We are happy to observe that the government of Bangladesh has taken necessary initiatives to expand Paediatric Surgery in all medical college hospitals, gradually in other hospitals and establish three new paediatric surgical specialty: Paediatric Urology, Neonatal Surgery & Paediatric Onco-surgery. It is a crucial time we start planning how we should nurture the newly developed branches.

Neonatal surgery is recognized as an independent discipline in many other countries requiring the expertise of paediatric surgeons to optimize outcomes in neonates with surgical conditions. Survival following neonatal surgery has improved dramatically in high income countries since the onset of neonatal surgery as an independent discipline in the past 60 years. However, conditions in our country is still below per. Survival of surgical neonates will surely improve if dedicated neonatal surgical wards can be made fully functional. Antenatal care is limited and only 10-15% anomalies can be detected prenatally, meaning that, neonatal surgical departments will have to deal with many severe congenital anomalies. The vulnerable neonates will need NICU support for surgery. Development of NICU with adequate space for surgical neonates is also a prerequisite for proper neonatal surgical care. Ensuring skilled surgical and anesthetic support during the off hours will also be a challenge since neonates tend to deteriorate rapidly due to their vulnerable physiology and poor reserve. Neonatal critical care including sophisticated cardiopulmonary support, utilization of parenteral nutrition and adjustments in fluid management, refinement of

surgical technique, and advances in surgical technology should develop simultaneously.

Worldwide, most paediatric urologists are associated with children's hospitals. In India, Paediatric Urology is practiced by Paediatric Surgeons with a special interest/ training in Paediatric Urology as well as by adult urologists who get trained in Paediatric Urology. More than one third of patients in paediatric surgical wards are admitted with urological abnormalities. The scope of using advanced technological supports in paediatric urology mandates special training, skill and a dedicated team.

Paediatric surgical oncology is a relatively new and rapidly evolving field. Paediatric solid tumors are a heterogeneous group with different malignancies affecting different organs, each having its own staging system, prognostic factors and varied chemotherapy protocols. Up to the early 20th century the only modality for the treatment of childhood solid tumors was radical resection. Now a days multimodal therapy including multi-drug chemotherapy; less cytotoxic biologic therapies such as anti-angiogenesis agents, growth factor receptor inhibitors, signal transduction inhibitors, targeted antibodies and immunotherapy; surgical resection and radiotherapy (RT) have increased cure rates in Wilms' tumor. Similar protocols have been adopted for other tumors such as neuroblastoma, rhabdomyosarcoma, Ewing's sarcoma, malignant germ cell tumors, and other solid tumors. In developed countries very high long-term survival of >85-90% has now been achieved and the aim of treatment for childhood cancers now is "childhood cancer is curable." Cancer survival has also improved in our country but still not up to the mark. Fewer paediatric oncology setups and trained

paediatric oncologists, and even rarer radiotherapy setups taking up the challenge of RT for the paediatric patients is the reality in our country. A child with cancer has to suffer a lot not only for the disease but also for the multimodal nature of its treatment involving multiple disciplines with unsatisfactory co-ordination and mutual relations.

Now that morbidity and mortality from common childhood illness, along with, surgical causes have been reduced to a significant level, time has come to focus on more specialized aspects, improve quality of care and proceed to excellence. To achieve that, the newly formed disciplines needs to be fully functional at the earliest convenience. The supporting nursing and technical staffs, necessary equipment, technology, wards, theatre facility-all needs to be established in the full swing. This is a daunting job and will require many devoted persons, many devoted hours and sacrifice. Development of good paediatric and neonatal anesthetic support is also now a demand of time. Post-graduation degree is also important in these subjects so that practitioners involved can work with dignity and authority.

On the flip side, there are still no paediatric surgical departments in private medical college hospitals,

district hospitals and most other hospitals. We still have to struggle to establish ourselves as specialist in paediatric surgery competing with the general surgeons and a part of paediatric surgical community still has to practice adult surgery for a living. The ultimate surgical care to children who constitute about half of the total population of the country will not be achieved neglecting paediatric surgery at institutional levels.

With the recent understanding and acknowledgement of impact of surgery on global health and economy by WHO through the works of lancet commission on global surgery, and inclusion of surgical care as an important component of SDG, paediatric surgical community in the country needs to increase its efforts to motivate government to flourish the current status of paediatric surgical facilities in the country.

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