Paediatric Minimal Access Surgery in Nepal: Foretime … now and henceforth

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The history of Paediatric Minimal Access Surgery (PMAS) in Nepal spans little short of a decade, the existence of the speciality itself that dates hardly to last fifty years.[1] While still growing under the shadow of general surgery, the ground work began in 1981 when two surgeons namely Drs. Rajbhandary and Thapa laid down the foundation work at a government funded facility. A speciality that is demarcated by age rather than diseases of an organ system seems to have faced its own share of hurdles right since its inception in Nepal. From lack of specialised operating rooms and dedicated paediatric and neonatal intensive care units to a deficiency of customized instruments, a lot needed to be done to achieve even near optimal results in the yesteryears.[1] Resultantly, a slow but notable metamorphosis in the timeline was observed that would predictably continue to evolve.

The surgical practice in Nepalese children, that had, for years, followed largely, open conventional techniques was about to change with the arrival of graduates who had undergone dedicated academic training as M.Ch. in Paediatric Surgery in the neighbouring India and Nepal. The latter half of 2017 marked the advent of consistent paediatric laparo-endoscopic services that had started with laparoscopic appendectomies as basic to eventually progress on to advanced paediatric laparo-endoscopy. A regular emergency procedure that involved plain simple cases of acute appendicitis was clearly being noted to expand its horizons to treat children with perforated, gangrenous and phlegmonous complications and even those with generalised peritonitis, covering the disease spectrum in its entirety with outstanding results in pain control, inpatient days, cosmesis and overall success.[2] This was true even in children with known haematological disorders.[3]

The most of the intussuscepted bowel in children was found to be getting amenable to endoscopic treatment if not already responding to less invasive options like hydrostatic or pneumatic reductions. Meckel's diverticulum with or without complications were similarly managed as were the children who had developed adhesive intestinal obstruction consequent to traditional laparotomies performed elsewhere.[4] Large ovarian cysts with or without torsions were exceedingly being managed with PMAS, likewise.

By the time, we realized that these frontiers could be pushed to include a major sub speciality of Paediatric Surgery-Paediatric Urology, we seemed to have sub-consciously adapted to its benefits already accumulating our series of experience in orchiopexy for intra-abdominal testicles, excision of urachal cysts, nephrectomy for non-functioning kidneys and pyeloplasty for UPJ obstructions, establishing the supremacy of PMAS. Even the repair of inguinal hernia and not so infrequent cholecystectomy for symptomatic gall stone disease had made their routine appearance in the regular operation list in our theatres.[5]

With application of MAS into the chest, the earlier associated mortality and morbidity of thoracotomies could now be greatly minimized. Children with unresolving empyema, a frequent condition amenable to Video Assisted Thoracoscopic Surgery (VATS) pleural decortication was received with consistently good and highly gratifying results. More recently, the expansion of PMAS in treatment of neonatal conditions like Congenital Diaphragmatic Hernia, Gut Malrotation, Trauma and pull-through for Hirschsprung's disease is the testimony to the fact that PMAS in Paediatric surgery has lots of promises to keep and a lot more applications to witness. It is quite encouraging to share that these procedures are a routine in some of the Kathmandu University affiliated medical colleges. The surgical robot in Nepal, which might probably be a reality in not-so-distant future is certainly very exciting but until then, Paediatric Advanced Minimal Access Surgery is here to stay.

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