

DEPARTMENT OF PAEDIATRIC SURGERY

Research Projects

S. No.	Research Project	Principal Investigator	Supervisor / cosupervisor(s)	Publication	Funding agency (if any)
1.	Management of Hirschsprung's disease: comparison of single stage reconstruction.	Dr. Richa Lal, Senior Research associate (SRA)	Dr. SK Aggarwal/ Dr. YK Sarin		CISR
2.	Management of Hirschsprung's disease: comparison of single stage reconstruction.	Dr. Sunil Kumar Yadav (SRA)	Dr. SK Aggarwal		CISR
3.	Evaluation of surgical methods for the treatment of high anorectal malformation with special emphasis on feasibility of neonatal pull through.	Dr. Deepak Goel (SRA)	Dr. SK Aggarwal		CISR
4.	Tabularised incised plate urethroplasty	Dr. Alpana Prasad	Dr. YK Sarin		CSIR
5.	Anterior sagittal anorectoplasty without colostomy using total gut irrigation	Dr. Alka Gupta	Dr. YK Sarin		CSIR
6.	Study of short-term prognosis in patients with posterior urethral valves.	Dr. Digant Pathak (MCh student)	Dr. YK Sarin	MCh Thesis	-
7.	To define the early prognostic factors determining mortality in surgical neonates.	Dr. Vivek Manchanda (MCh student)	Dr. YK Sarin	MCh Thesis; 1. Manchanda V, Sinha S, Sarin YK. Single center neonatal audit: can we predict mortality in a surgical neonate? J Indian Assoc Pediatr Surg. 2007; 12:166-186. 2. Manchanda V, Sarin YK, Ramji S. Prognostic factors determining mortality in surgical neonates. J Neonatal Surg. 2012; 1: 3	
8.	Urodynamic evaluation in children with posterior urethral valves.	Dr. Rupnayan Goswami (MCh	Dr. YK Sarin	MCh Thesis	-

		student)			
9.	Comparison of laparoscopic suturing vs non-suturing of the hernial sac.	Dr. Nitin Pant (MCh student)	Dr. SK Aggarwal	MCh Thesis; Pant N, Aggarwal SK, Ratan SK. Laparoscopic repair of hernia in children: comparison between ligation and non ligation of sac. J Indian Assoc Pediatr Surg.2014; 19:76-9.	-
10.	Correlation of imaging studies (functional and morphological) with renal histology in patients of congenital uretero-pelvic junction obstruction.	Dr. GN Mufti	Dr. YK Sarin	MCh Thesis	-
11.	Laparoscopic hernia repair in children – does partial excision of sac make an impact on outcomes.	Dr. Nitin Borkar (MCh student)	Dr. SK Aggarwal/ Dr. SK Ratan	MCh Thesis; Borkar NB, Pant N, Ratan S, Aggarwal SK. Laparoscopic repair of indirect inguinal hernia in children: does partial resection of the sac make any impact on outcome? J Laparoendosc Adv Surg Tech A. 2012; 22 :290-4.	-
12.	Evaluation of urodynamic abnormalities in patients with posterior urethral valves treated with bladder neck incision	Dr. BV Raghunath (MCh student)	Dr. YK Sarin	MCh Thesis	-
13.	Use of Tunica Vaginalis flap in hypospadias repair: comparison with Dartos flap	Dr. Anjan Dhua (MCh student)	Dr. SK Aggarwal	MCh Thesis; Dhua AK, Aggarwal SK, Sinha S, Ratan SK. Soft tissue covers in hypospadias surgery: Is tunica vaginalis better than dartos flap? J Indian Assoc Pediatr Surg. 2012; 17:16-9.	-
14.	Posterior urethral valves: Is normalization of urethral ratio as indicated on MCU sufficient in management of these patients	Dr. Vidyanand Deshpande (MCh student)	Dr. YK Sarin/ Dr. SK Ratan	MCh Thesis	-
15.	Assessment of Interferential therapy in urinary incontinence due to neurogenic bladder.	Dr. Abhishek Tiwari (MCh student)	Dr. YK Sarin/ Dr. SK Ratan	MCh Thesis	-
16.	Role of laparoscopy in chronic abdominal pain with persistent	Dr. Sudhir Singh (MCh student)	Dr. SK Aggarwal	MCh Thesis;	-

	mesenteric lymph nodes in children.				
17.	Laparoscopic assisted trans anal pull through for Hirschsprung's disease: comparison between partial and near total laparoscopic mobilization of rectum.	Dr. Mohit Mathur (MCh student)	Dr. SK Aggarwal/ Dr. SK Ratan	MCh Thesis; Mathur MK, Aggarwal SK, Ratan SK, Sinha SK. Laparoscopic-assisted transanal pull-through for Hirschsprung's disease: Comparison between partial and near total laparoscopic mobilization of rectum. J Indian Assoc Pediatr Surg. 2014; 19:70-5.	-
18.	Evaluation of hormonal profile in the patients presenting with isolated hypospadias	Dr. SK Ratan	Dr SK Aggarwal (co-investigator)	1) Ratan SK, Aggarwal S, Mishra TK, Saxena A, Yadav S, Pandey R, Sharma A, et al. Children with isolated hypospadias have different hormonal profile compared to those with associated anomalies. J Pediatr Endocrinol Metab. 2012; 25:111-9. 2) Ratan SK, Aggarwal SK, Mishra TK, Saxena A, Yadav S, Pandey RM, et al. Hormonal profile in children with isolated hypospadias associates better with comprehensive score of local anatomical factors as compared to meatal location or degree of chordee. Indian J Endocrinol Metab. 2014; 18:558-64.	UGC
19.	Patterns of infection in surgical neonates in a tertiary referral center of a developing country.	Akshita Soni (MBBS student)	Dr. YK Sarin/ Dr. SK Ratan	Project for Short-term studentship (STS) 2012	ICMR
20.	Predictive value of bedside cystometry against that of urodynamic study in diagnosing functional abnormalities in pediatric patients.	Dr. Sandeep Kumar Rahul (MCh student)	Dr. YK Sarin/ Dr. SK Ratan	MCh Thesis	-
21.	Comparison of juxta-urethral plate Buck's fascia with vascularized dorsal dartos as soft tissue interposition flap in	Dr. Anita Gangrude (MCh resident)	Dr. SK Ratan/ Dr. YK Sarin		-

	the outcome of hypospadias surgery				
22.	To study the role of uroflowmetry before and after hypospadias repair.	Dr. Rajat Piplani (MCh resident)	Dr SK Aggarwal/ Dr. SK Ratan		-
23.	Assessment of the role of interferential stimulation treatment of children with fecal incontinence following corrective surgeries for ano-rectal malformations	Dr. Prince Raj (MCh resident)	Dr. YK Sarin	MCh Thesis	-
24.	Effect of endoscopic valve incision and bladder neck incision on bladder dysfunction in patients with posterior urethral valve.	Dr. Hamid Wani (MCh resident)	Dr. YK Sarin	MCh Thesis	-
25.	Assessment of serum Inhibin -B, reproductive hormones and testicular volume in children with hypospadias.	Dr. BK Tripathi (MCh student)	Dr. SK Ratan/ DR SK Aggarwal	MCh Thesis	-
26.	Intermediate term outcome of lung resection in children.	Dr. RS Sisodia (MCh student)	Dr. SK Aggarwal/ Dr SK Ratan	MCh Thesis	-
27.	Randomised controlled trial of fast track protocol versus conventional protocol for colostomy closure in children.	Dr. Nirali Shah (MCh student)	Dr. YK Sarin	MCh Thesis	-
28.	Association of serum Inhibin and FSH and testicular echogenicity, volume and vascularity in children with undescended testes.	Dr. Abhishek Chinya (MCh student)	Dr. SK Ratan	MCh Thesis; Chinya A, Ratan SK, Aggarwal SK, Garg A, Mishra TK. Association of levels of serum Inhibin B and Follicle-stimulating Hormone with testicular vascularity, volume, and echotexture in children with undescended testes. J Indian Assoc Pediatr Surg. 2017 Jan-Mar;22(1):3-8.	-
29.	Study of the hormonal profile and role of MAMLD1 (Cxorf6) gene polymorphism in	Anju Sharma	Dr. TK Mishra/ Dr. SK Ratan	PhD dissertation (ongoing)	-

	children with isolated hypospadias.				
30.	Genetic Polymorphism of MAMLD1 (CXorf6) gene in children with isolated hypospadias	Dr. SK Ratan/ Dr SK Aggarwal		Ratan SK, Sharma A, Kapoor S, Polipalli SK, Dubey D, Mishra TK, Sinha SK, Aggarwal SK. Polymorphism of 3' UTR of MAMLD1 gene is also associated with increased risk of isolated hypospadias in Indian children: a preliminary report. <i>Pediatr Surg Int.</i> 2016; 32:515-24.	ICMR
31.	Use of Botulinum toxin -A for management of neurogenic bladder refractory to anticholinergics	Dr. Shalini Sinha nee Mishra (Asst. Professor)	Dr. YK Sarin		University of Delhi
32.	Comparison of short term outcome of surgery versus conservative management in infants with grade 3-4 hydronephrosis	Dr. Chiranjiv Kumar Gupta (MCh student)	Dr. YK Sarin	MCh Thesis (under submission to University of Delhi)	-
33.	Pattern and incidence of congenital anomalies in children born after ART (assisted reproductive techniques) induced pregnancies and their comparison with normal pregnancies	Dr. Wasim (MCh student)	Dr. SK Ratan	MCh Thesis (under submission to University of Delhi)	
34.	Assessment of cosmetic outcome and quality of life in children who have undergone hypospadias repair	Dr. Parveen Kumar (MCh student)	Dr. SK Ratan	MCh Thesis (under submission to University of Delhi)	
35.	Comparison of percutaneous pigtail catheter drainage with trocar chest-tube drainage for the management of liver abscess in children.	Dr. Ashwini Khanolkar (MCh student)	Dr. SK Ratan	MCh Thesis (under submission to University of Delhi)	
36.	Effect of enteral hyperalimentation on incidence of neutropenia and need of G-CSF in patients of Wilms' tumor being administered	Dr. Priti Kashyap (MCh student)	Dr. YK Sarin	MCh Thesis (ongoing)	

	chemotherapy				
37.	Predictors of early stomal complications for children with temporary abdominal stoma (ileostomy/colostomy)	Dr. Sachin Katyal (MCh resident)	Dr. SK Ratan	MCh Thesis (ongoing)	
38.	Comparison of simultaneous vs. sequential ventriculo-peritoneal shunt in infants with spina bifida.	Dr. Praney Gupta (MCh student)	Dr. SK Sinha/ Dr. SK Ratan	MCh Thesis (ongoing)	
39.	Intussusception in infants: Multiple hospital based surveillance in India	Dr. YK Sarin (member of Technical Advisor Group); Dr. SK Ratan, Site investigator		Ongoing	INCLIN
40.	Correlation of plasma renin activity (PRA) values and resistive index on Doppler ultrasound with findings of renal dynamic scan with Society of Fetal Ultrasound (SFU) grades 3 and 4 unilateral hydronephrosis (HDN).	Dr. Prashant Zulpi (MCh student)	Dr. YK Sarin	MCh Thesis (ongoing)	
42.	Comparison of 'Gross and Fergusson' and Mitchell-Banks' inguinal hernia repair technique in terms of early complications in pediatric population with congenital inguinal hernia.	Dr. Nitin Jain (MCh Student)	Dr. SK Sinha/ Dr. YK Sarin	MCh Thesis (ongoing)	
43.	Early follow up of children with surgically pexed undescended testes with respect to Testicular volume and Echogenicity.	Dr. Sachin Bansal	Dr. SK Ratan/ Dr. YK Sarin	MCh Thesis (ongoing)	
44.	Assessment of distribution of interstitial cell of cajal across upper urinary tract region in children with pelvic ureteric junction obstruction and	Dr. Ashish Kumar Tiwari (MCh student)	Dr. SK Ratan/ Dr. YK Sarin	MCh Thesis (ongoing)	

	its correlation with renal sonological Parameters				
Collaborative research with other Departments in MAMC and associated Lok Nayak Hospital					
1.	Evaluation of the efficacy of intralesional bleomycin injection and oral propranolol in the management of hemangioma.	Dr. Piyush Thayal (DNB Plastic Surgery student)	Co-supervisor Dr YK Sarin	Thayal PK, Bhandari PS, Sarin YK. Comparison of efficacy of intralesional bleomycin and oral propranolol in management of hemangiomas. Plast Reconstr Surg. 2012 Apr; 129 (4): 733e-5e.	-
2.	Comparative evaluation of combined ilioinguinal iliohypogastric block versus caudal block using Ropivacaine & Clonidine for Paediatric postoperative analgesia following inguinal hernia repair.	Dr. Sadhana Saini (MD Anesthesia student)	Co-supervisor Dr YK Sarin		-
3.	Comparative evaluation of single level paravertebral block and caudal block for post-operative analgesia in pediatric inguinal surgery.	Dr. Silvy Anna Varughese (MD Anesthesia student)	Co-supervisor Dr. YK Sarin		-
4.	Patients' perception of service quality in a secondary and tertiary care hospitals in Delhi.	Dr. Saket Prashar (MD Preventive and social Medicine student)	Co-supervisor Dr. YK Sarin		-
5.	The clinico-aetiological profile of febrile neutropenia in children with malignancy	Dr. Annesha Chakraborti (MD Pediatrics student)	Co-supervisor Dr. YK Sarin		-
6.	Comparison of adequacy of ventilation between I-gel and endotracheal intubation in pediatric laparoscopic surgeries.	Dr. Megha (MD Anesthesia student)	Co-supervisor Dr. SK Aggarwal		-
7.	I-gel vs. Proseal Laryngeal Mask Airway: A prospective randomised controlled study in mechanically ventilated children	Dr Anita Murmu (MD Anesthesia student)	Co-supervisor Dr. SK Aggarwal		-

	undergoing laparoscopic procedures.				
8.	Study of peritoneal recesses with special reference to internal herniae.	Dr Shivpal Tamde (MS Anatomy student)	Co-supervisor Dr. SK Aggarwal		-
9.	To study clinical course and outcome of pyogenic empyema in children treated with antibiotics and chest tube drainage.	Dr. Anil Kumar (MD Pediatrics student)	Co-supervisor Dr. SK Aggarwal	Kumar A, Sethi GR, Mantan M, Aggarwal SK, Garg A. Empyema thoracis in children: a short term outcome study. Indian Pediatr. 2013 Sep;50(9):879-82.	-
10.	To evaluate the clinical efficacy of total intravenous anaesthesia in Paediatric laparoscopic surgery.	Dr. Sunil Thakur (MD Anesthesia student)	Co-supervisor Dr. SK Aggarwal		-