

# **Curriculum Vitae**

**Mr. Alireza S. Keshtgar**

BSc, MB BS, FRCSI, FRCS (Paed), PhD

**Consultant Paediatric Surgeon &  
Honorary Senior Lecturer**

Evelina London Children's Hospital  
Guy's & St Thomas' NHS Foundation Trust  
King's College, University of London

&

Honorary Professor of Paediatric Surgery  
Shiraz University of Medical Sciences

**January 2017**

## Personal Details

**Name** Alireza Safaei Keshtgar

**Sex** Male

**Date of Birth** 05.04.1961

**Nationality** Iranian

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## Qualifications

**BSc** 12.07.1984  
University of the Punjab,  
Lahore.

**MB BS** 30.09.1986  
King Edward Medical University,  
Lahore

**FRCSI** 06.07.1992  
Royal College of Surgeons in Ireland

**FRCS (Paeds)** 30.09.1999  
Intercollegiate Speciality Board in Paediatric Surgery,  
Royal College of Surgeons in Edinburgh,  
United Kingdom

**Postgraduate Certificate in  
Health Research and  
Development** 25.06.1999  
University of Portsmouth  
School of Postgraduate Medicine, Portsmouth

**PhD degree** 01/05/2009  
King's College, University of London

**Honorary Professor of  
Paediatric Surgery** 25/10/2015  
Awarded by The Shiraz University of Medical Sciences,  
Iran

## Registration and Membership of Professional Bodies

**General Medical Council** Registration No. 4479712

**Entry in Specialist Register of General Medical Council** 14/09/2004

**Medical Protection Society** Membership No. 177768

**British Medical Association** Membership No. 7019284

**British Association of Paediatric Surgeons (BAPS)** Member since 1997

**British Association of Paediatric Endoscopic Surgeons (BAPES)** Member since 2006

## Consultant Appointment

<b>Dates</b>	<b>Grade / Speciality</b>	<b>Hospital</b>
<b>01/09/2010 to date</b>	Consultant Paediatric Surgeon & Honorary Senior Lecturer	Evelina London Children's Hospital, Guy's & St Thomas' NHS Foundation Trust, King's College, University of London
<b>04/10/2004 to 03/08/2010</b>	Consultant Paediatric Surgeon	University Hospital, Lewisham, NHS Trust, London

## Previous Appointments And Trainings

<b>01/10/2003-03/10/2004</b>	Specialist Registrar in Paediatric Surgery	Great Ormond Street Hospital for Children, NHS Foundation Trust, London
<b>02/04/2003-30/09/2003</b>	Specialist Registrar in Paediatric Surgery	University Hospital Lewisham, NHS Trust, London

<b>01/10/2000-01/04/2003</b>	Clinical Research Fellow Paediatric Surgery	Guy's and St Thomas' NHS Foundation Trust, London
<b>01/10/2000-01/04/2003</b>	Specialist Registrar (on call) Paediatric Surgery	St George's Hospital NHS Trust, London
<b>01/10/1999-30/09/2000</b>	Clinical Fellow Paediatric Surgery	University Hospital Lewisham, NHS Trust, London
<b>04/08/1997 – 03/08/1999</b>	Specialist Registrar in Paediatric Surgery	Southampton University Hospital, NHS Trust, Southampton
<b>10/10/1994- 31/07/1997</b>	Specialist Registrar in Paediatric Surgery	Alder Hey Children's NHS Foundation Trust, Liverpool
<b>01/07/1993 – 30/09/1994</b>	Registrar in Paediatric Surgery	The Children's Hospital Temple Street, Dublin

## **Summary of Experience as a Consultant Paediatric Surgeon**

**Evelina London Children's Hospital, Guy's & St Thomas' NHS Foundation Trust, London from 01.09.2010 to date and University Hospital, Lewisham NHS Trust, London from 04/10/2004 to 31/08/2010**

I have been a full time Consultant Paediatric and Neonatal Surgeon at Evelina London Children's Hospital, Guy's and St Thomas' NHS Foundation Trust and University Hospital Lewisham, NHS Trust since October 2004. The paediatric surgery services were based at University Hospital Lewisham until September 2010. Then services were transferred to Evelina Children's Hospital, where acute emergency and elective complex paediatric and neonatal surgeries are performed. I provide the emergency and elective services along with 5 other consultant colleagues on 1 in 6 on call rota.

My practice includes neonatal surgery, colorectal surgery, laparoscopy and the general surgery of children. I have two all day theatre sessions and two all day outpatient clinic sessions at Evelina Hospital every month and two all day theatre sessions and one all day and one half day outpatient clinic sessions at University Hospital Lewisham every month. This includes one specialised colorectal clinic in each Hospital every month. I have two outreach clinics alternating every month between Ashford and Maidstone.

The Evelina is a major Regional Specialist Hospital in London taking referrals from a population of approximately 3 million in South East England.

I have the following experience and interests:

**Expertise in investigations and surgical treatments of colorectal disorders in children and subspecialty interest in the field of minimally invasive surgery.** I have developed a special interest in anorectal manometry, biofeedback training, endosonography and treatment of Hirschsprung disease, anorectal malformation, chronic functional constipation and faecal incontinence. My colorectal referrals come from a wide network of national and international sources.

I have wide experience in lower and upper gastrointestinal surgery and minimally invasive surgery. This includes percutaneous endoscopic insertion of feeding gastrostomy and jejunostomy, antegrade continent enema (ACE) stoma, appendicectomy, staged Fowler Stephen's orchidopexy, inguinal herniotomy and ovarian pathologies.

I successfully secured funding of business case proposals to purchase laparoscopy stack systems and instruments at Evelina Children's Hospital and Lewisham Hospital.

**Extensive experience in surgical treatment of major neonatal disorders** including necrotising enterocolitis, Hirschsprung disease and anorectal malformation, repair of oesophageal atresia and tracheoesophageal fistula, diaphragmatic hernia and intestinal atresia, exomphalos and gastroschisis and correction of intestinal malrotation and volvulus. I implemented the bedside sutureless closure of gastroschisis following insertion of a pre formed silo in our department.

**Drawn several neonatal surgical guidelines in collaboration with a neonatologist colleague for our neonatal intensive care unit at St Thomas' Hospital.** These guidelines have been adopted by our hospital and include management of gastroschisis, exomphalos, Hirschsprung disease, anorectal malformation, bilious vomiting, necrotising enterocolitis, oesophageal atresia and tracheoesophageal fistula, diaphragmatic hernia and procedures of rectal suction biopsy and rectal wash out.

**Developed a few pioneering innovations to manage children with colorectal motility disorders.** These include the transcutaneous needle-free injection of botulinum toxin as a novel treatment of chronic idiopathic constipation and anal fissure in children. The botulinum toxin treatment is a brand new innovation in the NHS, which is published in peer reviewed journals and being used worldwide.

**Set up the innovative service of awake anorectal manometry and biofeedback training and endosonography in our department.** This service has obviated the need for ketamine anaesthesia and has improved theatre utilisation for surgical procedures. The awake studies provide more information about lower GI sensory and pelvic floor dynamic functions.

**Established a close working relationship with our neonatologists, gastroenterologists, urologists, cardiologists, community paediatricians and clinical nurse specialists.** This has been essential to deliver a high quality service based on multidisciplinary team (MDT) management of patients with complex medical and surgical disorders.

I fully recognise the importance of working as a team and having a good professional relationship with surgical and medical colleagues, nursing staff, secretaries, patients and their family.

**Honorary Senior Lecturer King's College, University of London**

I have been awarded the title of Honorary Senior Lecturer in recognition of my research and undergraduate and postgraduate teachings and trainings from King's College, University of London on 1<sup>st</sup> November 2012.

My research work is recognised nationally and internationally and has led to numerous publications in international peer reviewed Journals and presentations in international conferences. My research work has provided evidence for the first time, based on double blind randomised control trials for investigations and surgical treatment of chronic idiopathic constipation and faecal incontinence in children.

## **Undergraduate Teaching**

I am supervising the 4<sup>th</sup> and 5<sup>th</sup> year medical students affiliated to my firm for their undergraduate Special Study Modules (SSM) and their career module. I have been actively involved in regular teaching of medical students at bedside and at outpatient clinics and giving lectures in their symposiums.

I have been an internal examiner for Year 4 Objective Structured Clinical Examinations and final year MB BS programme at King's College, University of London.

## **Postgraduate Teaching**

I am actively involved in regular formal teaching and training of specialist registrars, junior doctors and nursing staff in our department.

I give formal lectures to GPs and to postgraduate trainees on Deanery Regional Study Day about common paediatric surgical problems.

## **Audit Lead**

I am the Audit lead for Paediatric Surgery at Evelina London Children's Hospital. I have led 15 audits, of which 10 have been published in peer reviewed journals & all presented in international peer reviewed international conferences.

## **Member of Intercollegiate Speciality Board of Examiners in Paediatric Surgery**

I am a member of the Intercollegiate Speciality Board of Examiners of Royal Colleges of Surgeons of Great Britain and Ireland in written section of exit exam in paediatric surgery.

## **Organiser of International Anorectal manometry and Endosonography Training Course and Workshop in United Kingdom and Iran**

I have organised and run in collaboration with colleagues the International Training Course and

Workshop in Anorectal Manometry and Endosonography in United Kingdom in February 2012 and May 2014. This course has been successful in training the paediatric surgeons, paediatricians, gastroenterologists and clinical nurse specialists from United Kingdom and other countries in Europe, America and Asia.

I have also run the second national anorectal manometry and endosonography course and workshop, which included hands on training and video link with operation theatre at the Shiraz University of Medical Sciences in December 2015. The feedback from delegates attending the courses has been very positive and they have requested to conduct the courses more frequently.

### **Faculty of operative Skills in Neonatal & Paediatric Surgery, 22-23 April 2015**

I am a faculty member of above paediatric surgical training course organised by the Royal College of Surgeon in England.

### **Faculty of International Paediatric Endoscopic Workshop, Leeds Institute for Minimal Invasive Therapy, 14-17 July 2015**

I am a faculty member of above hands on laparoscopy training course organised by the Royal College of Surgeon in England.

### **Member of International Affairs Committee of the British Association of Paediatric Surgeons**

I am a member of the International Affairs Committee of the British Associations of Paediatric Surgeons (BAPS). The committee facilitates award of scholarships and travelling fellowships to trainees and established paediatric surgeons from Africa, Asia and Middle East to attend BAPS conference and observe paediatric surgery practice in United Kingdom. The committee also provides simulation skills training course in these countries.

### **Research Supervisor**

I have been the supervisor for clinical research fellow in paediatric surgery. I am the chief investigator for 'Double blind randomised control trial of needle-free injection of botulinum toxin into the external anal sphincter versus control for treatment of chronic idiopathic constipation in children'. The ethics committee at St Thomas' Hospital has approved the trial, which will be done after obtaining funding and approval from R&D department.

I am the local co-investigator for multicentre randomised trial of interval appendicectomy in children (CHINA study) at Evelina Children Hospital, London.

### **Peer Review Activity**

I am a peer reviewer for the following Journals:

1. Journal of Pediatric Surgery.
2. British Medical Journal.

3. Journal of Pediatric Gastroenterology and Nutrition.
4. European Journal of Gastroenterology and Hepatology.
5. Biomed Central Gastroenterology
6. Pediatric International.
7. Clinical and Experimental Gastroenterology

## Peer Reviewed Publications

1. Thakkar H., Bassett C., Hsu A., Kufeji D., Agrawal M., Richards C., **Keshtgar A.S.** Functional Outcomes in Hirschsprung Disease - A Single Institution's 12-year Experience. Accepted for publication in the Journal of Pediatric Surgery. In press February 2017.
2. **Keshtgar A.S.**, Kufeji D., Choudhry M.S., Clayden G.S., Ward H.C. Anorectal manometry with and without ketamine for evaluation of defecation disorders in children. *J Pediatr Surg.* 2015 Mar; 50(3): 438-43.
3. **Keshtgar A.S.**, Ward H.C., Clayden G.S. Pathophysiology of chronic childhood constipation: Functional and morphological evaluation by anorectal manometry and endosonography and colonic transit study. *J Pediatr Surg.* 2013 Apr; 48(4): 806-12.
4. Sadeghi R., Kianifar H.R., Pardis S.H., Adineh P.Z., Dabbagh V.R., **Keshtgar A.S.** Accuracy of hepatobiliary scintigraphy for differentiation of neonatal hepatitis from biliary atresia: systematic review and meta-analysis of the literature. *Pediatr Radiol.* 2013 Aug; 43(8): 905-19.
5. Njere I., Islam S., Parish D., Kuna J. **Keshtgar A.S.** Outcome of peripherally inserted central venous catheter in surgical and medical neonates. *J Pediatr Surg.* 2011 May; 46(5): 946-50
6. Clayden G.S., Adeyinka T., Kufeji D., **Keshtgar A.S.** Surgical management of severe chronic constipation. *Arch Dis Child.* 2010 Nov; 95(11): 859-60. Epub 2010 Jun 7.
7. **Keshtgar A.S.**, Ward H.C. Clayden G.S. Transcutaneous needle-free Injection of botulinum toxin: A novel treatment of childhood constipation and anal fissure. *J Pediatr Surg.* 2009 Sep; 44(9): 1791-8
8. Hall N., Kufeji D, **Keshtgar A.S.** Out with the old and in with the new: A comparison of rectal suction biopsies with traditional and modern biopsy forceps. *J Pediatr Surg.* 2009; 44, 395-398.
9. **Keshtgar A.S.**, Athanasakos E., Clayden G.S., Ward H.C. Evaluation of outcome of anorectal anomaly in childhood: The role of anorectal manometry and endosonography. *Pediatr Surg Int* 2008 Aug; 24(8): 885-92. Epub 2008 May 30.
10. **Keshtgar A.S.**, Solitary rectal ulcer syndrome in children (Leading Article). *Eur J Gastroenterol Hepatol.* 2008 Feb; 20(2): 89-92.
11. **Keshtgar A.S.**, Ward H.C., Sanei A., Clayden G.S. Botulinum toxin, a new treatment modality for chronic idiopathic constipation in children: long-term follow-up of a double-blind randomized trial. *J Pediatr Surg.* 2007 Apr; 42(4): 672-80.
12. **Keshtgar A.S.**, Ward H.C., Richards C., Clayden G.S. Outcome of excision of megarectum in children with anorectal malformation. *J Pediatr Surg.* 2007 Jan; 42(1): 227-33.



13. **Keshtgar A.S.**, Ward H.C., Clayden G.S. Role of anal dilatation in treatment of idiopathic constipation in children: Long-term follow up of a double blind randomized controlled study. *Pediatr Surg Int* 2005; 21:100-105.
14. **Keshtgar A.S.**, Ward H.C., Clayden G.S. Thickening of the internal anal sphincter in idiopathic constipation in children. *J Pediatr Surg* 2005; 40:1217 (Abstract).
15. Clayden G.S., **Keshtgar A.S.**, Carcani-Rathwell I., Abhyankar A. The management of chronic constipation and related faecal incontinence in childhood. *Arch Dis Child Pract* 2005; 90 ep58-ep67, doi: 10.1136/adc.2004.066019.
16. **Keshtgar A.S.**, Clayden G.S., Ward H.C. Diagnosis and management of children with intractable constipation (Invited Article). *Semin Pediatr Surg* 2004; 13:300-309.
17. **Keshtgar A.S.**, Ward H.C., Clayden G.S. Thickening of the internal anal sphincter in idiopathic constipation in children. *Pediatr Surg Int* 2004; 20:817-823.
18. Clayden G.S., **Keshtgar A.S.** Management of childhood constipation. *Postgrad Med J.* 2003 Nov; 79(937): 616-21.
19. **Keshtgar A.S.**, Ward H.C., Clayden G.S. Investigations for incontinence and constipation after surgery for Hirschsprung's disease in children. *Pediatr Surg Int* 2003; 19: 4-8.
20. **Keshtgar A.S.**, Griffiths M.D. Incarceration of umbilical hernia in children: Is the trend increasing? *Eur J Pediatr Surg* 2002; 12:1-4.
21. **Keshtgar A.S.**, Rickwood A.M.K. Urological consequences of incomplete cord lesions in patients with myelomeningocele. *Br J Urol* 1998; 82: 258-260.
22. **Keshtgar A.S.**, Turnock R.R. Wandering calcified ovary in children. *Pediatr Surg Int* 1997; 12: 215-216.
23. **Keshtgar A.S.**, Losty P.D., Pierro A., Lloyd D.A. Recent advances in the management of Peutz Jeghers Syndrome in children. *Eur J of Pediatr Surg* 1997; 367-368.
24. Buckley T.F., **Keshtgar A.S.** et al European Subarachnoid Haemorrhage Study Group. Effect of calcitonin gene related peptide (CGRP) in patients with delayed postoperative cerebral ischaemia after aneurysmal subarachnoid haemorrhage. *Lancet* 1992; 339: 831-34.

## Peer Reviewed Presentations

1. **Keshtgar A.S.**, Thakkar H., De Rome K. Outcome of botulinum toxin treatment for functional constipation in children.  
Presented in World Federation of Association of Pediatric Surgeons, Washington DC 8-11 October 2016.
2. Nellihela L., Said A., Upadhyaya M., Bouhadiba N., **Keshtgar A.S.**, Richards C., Kufeji D. Agrawal M. Clinical outcome of patients with congenital Herat defecata and congenital diaphragmatic hernia.  
Presented in World Federation of Association of Pediatric Surgeons, Washington DC 8-11 October 2016

- Nellihela N., **Keshtgar A.S.** Outcome of antegrade continent enema (ACE) stoma for treatment of chronic constipation and faecal incontinence in children.

Presented at the 24th Congress of the Asian Association of Pediatric Surgeons and 53rd Annual Congress of Japanese Society of Pediatric Surgeons, Fukuoka, Japan, 24-26 May 2016.

- Thakkar H., Bassett C., Hsu A., Kufeji D., Agrawal M., Richards C., **Keshtgar A.S.** Outcomes in Hirschsprung Disease - A Single Institution's 10-year Experience.

Presented at the 24th Congress of the Asian Association of Pediatric Surgeons and 53rd Annual Congress of Japanese Society of Pediatric Surgeons, Fukuoka, Japan, 24-26 May, 2016.

- Manuele R., Cheung S., Kufeji D., Richards D, Kadhim H, Matthews C, **Keshtgar A.S.** Effect of intrasphincteric botulinum toxin on post operative obstructive symptoms in children with Hirshsprung disease.

Presented at 22<sup>nd</sup> International Colorectal Club Conference, Milan 13-15 June 2015.

- Hall N.J., Stanton M.P., Burge D.M., Pierro A., Eaton S. on behalf of the CHINA study collaborators and the PSTRN: Active observation versus interval appendicectomy following successful non-operative treatment of appendix mass in children: randomised controlled evaluation.

- Bisharat M., **Keshtgar A.S.** Botulinum toxin: A new solution for an old problem. Presented as an abstract at 61st Annual International Congress of British Association of Paediatric Surgeons Edinburgh 16-19 July 2014.

- Naqvi S., Lupi M., Gkoutzios P., Kufeji D., Ahmad S., Agrawal M., Richards C., Upadhayaya M., **Keshtgar A.S.** Outcome of feeding percutaneous endoscopic gastrostomy with a jejunal extension versus surgical jejunostomy in children. Presented at International Congress of European Paediatric Surgeons' Association in Dublin, 18-21 June 2014.

- Keshtgar A.S.**, Kader S., Younis A., Kufeji D., Malakounides G. Internal anal sphincter achalasia: Myth or reality? Presented at International Congress of European Paediatric Surgeons' Association in Dublin, 18-21 June 2014.

- Pong F.X., Purmah, N., **Keshtgar, A.S.** Complications of percutaneous gastrostomy and jejunostomy in children. Presented at 60<sup>th</sup> Annual International Congress of British Association of Paediatric Surgeons Bournemouth 16-19 July 2013.

- Fouad, D., Beak, P. Kufeji D., **Keshtgar, A.S.** Outcome of Pyloromyotomy for pyloric stenosis. Presented at Tripartite meeting in collaboration with King's College Hospital and St George's Hospital and presented in Tripartite meeting in London, December 2013.

- Keshtgar A.S.**, Choudhry M.S., Harry C. Ward, Graham S. Clayden. Anorectal manometry under ketamine anaesthesia and awake for evaluation of defecation disorder in children. Presented at 59<sup>th</sup> Annual International Congress of British Association of Paediatric Surgeons and European Association of Pediatric Surgeons, Rome, 13-16 June 2012.

- Njere I, Hedayati B, Salari, R, Kufeji D, **Keshtgar A.S.** Correlation between radiographic and

- histologic transition zones in Hirschsprung disease. Presented at 58<sup>th</sup> Annual International Congress of British Association of Paediatric Surgeons, Belfast 19-22 July 2011.
14. Featherstone N, Dove J, **Keshtgar A.S.** Peritoneal microbiology swabs in acute paediatric appendicitis: Are they necessary? Presented at 58<sup>th</sup> Annual International Congress of British Association of Paediatric Surgeons, Belfast 19-22 July 2011.
  15. Njere I., Islam S., Parish D., Kuna J. **Keshtgar A.S.** Outcome of peripherally inserted central venous catheter in surgical and medical neonates. Presented at 42<sup>nd</sup> Annual International Congress of Canadian Association of Paediatric Surgeons (CAPS), Saskatoon, 23-25 September 2010.
  16. Alexander N., Kufeji D. **Keshtgar A.S.** Evolution in the management of gastroschisis in a single centre. Presented at 57<sup>th</sup> Annual International Congress of British Association of Paediatric Surgeons (BAPS), Aberdeen, 21-25 July 2010.
  17. **Keshtgar A.S.**, Ward H.C., Clayden G.S. Transcutaneous needle-free Injection of botulinum toxin into the external anal sphincter: A novel treatment for chronic idiopathic constipation in children. Presented at 55<sup>th</sup> Annual International Congress of British Association of Paediatric Surgeons (BAPS), Salamanca, Spain, 2-5 July 2008.
  18. Islam S., Gonzalez J., **Keshtgar A.S.** Outcome of peripherally inserted central venous catheter (PICC) in surgical and medical neonates. Presented at 55<sup>th</sup> Annual International Congress of British Association of Paediatric Surgeons (BAPS), Salamanca, Spain, 2-5 July 2008.
  19. **Keshtgar A.S.**, Hall N., Kufeji D. Out with the old and in with the new: A comparison of rectal suction biopsies with traditional and modern biopsy forceps. Presented at 55<sup>th</sup> Annual International Congress of British Association of Paediatric Surgeons (BAPS), Salamanca, Spain, 2-5 July 2008.
  20. **Keshtgar A.S.**, Clayden G.S., Ward H.C. Use of Botulinum toxin in treatment of childhood constipation. Presented at International Joint Paediatric Surgical and Medical Chronic Constipation Seminar, Margate, 8-9 November 2007.
  21. **Keshtgar A.S.**, Ward H.C., Clayden G.S. Prognostic role of anorectal manometry, endosonography and intestinal transit studies in management of childhood constipation and faecal incontinence. Presented at 54<sup>th</sup> Annual International Congress of British Association of Paediatric Surgeons (BAPS), Edinburgh, 17-20 July 2007.
  22. Ward H., **Keshtgar A.S.**, Scott M., Lunniss P., Aziz Q. Investigation of constipation in children. Presented at International Pediatric Colorectal Conference, York, 14-16 July 2007.
  23. **Keshtgar A.S.**, Ward H.C., Clayden G.S. Needle-free injection of botulinum toxin: A novel treatment for chronic idiopathic constipation in children (Preliminary Report). Presented at International Pediatric Colorectal Conference in Helsinki, 15-17 July 2006.
  24. **Keshtgar A.S.**, Ward H.C., Clayden G.S. Double blind randomised trial of botulinum toxin injection versus myectomy of the internal anal sphincter in treatment of chronic idiopathic constipation in children. Presented at 51<sup>st</sup> Annual International Congress of British Association of Paediatric Surgeons (BAPS), Oxford 27-30 July 2004.
  25. **Keshtgar A.S.**, Ward H.C., Richards C., Clayden G.S. Outcome of excision of megarectum in children with anorectal anomaly with respect to sphincter quality and presence or absence of

- neuropathy. Presented at 51<sup>st</sup> Annual International Congress of British Association of Paediatric Surgeons (BAPS), Oxford 27-30 July 2004.
26. **Keshtgar A.S.**, Sanei A., Ward H.C. Manometry data analysis for windows in clinical practice. Presented at 15<sup>th</sup> International Research Symposium in Pediatric Surgery, Marseille, 3- 4 October 2003.
  27. **Keshtgar A.S.**, Ward H.C., Clayden G.S. Anorectal manometry under ketamine anaesthesia in children: A reliable technique. Presented at 15<sup>th</sup> International Research Symposium in Pediatric Surgery, Marseille, 3- 4 October 2003.
  28. **Keshtgar A.S.**, Ward H.C., Richards C., Clayden G.S. Endosonography and sphincter quality after repair of anorectal anomaly in children. Presented at 50<sup>th</sup> Annual International Congress of British Association of Paediatric Surgeons (BAPS), Estoril, Portugal 15-18 July 2003.
  29. **Keshtgar A.S.**, Clayden G.S., Ward H.C. Thickening of the internal anal sphincter in idiopathic constipation in children. Presented at 50<sup>th</sup> Annual International Congress of British Association of Paediatric Surgeons (BAPS), Estoril, Portugal 15-18 July 2003.
  30. **Keshtgar A.S.**, Clayden G.S., Ward H.C. Role of anal dilatation in the treatment of idiopathic constipation in Children: Preliminary results of a double blind randomised controlled Trial. Presented at 50<sup>th</sup> Annual International Congress of British Association of Paediatric Surgeons (BAPS), Estoril, Portugal 15-18 July 2003.
  31. **Keshtgar AS**, Clayden G.S., Ward H.C. Surgery for Idiopathic Megarectum in Children. Presented as a Poster at 49<sup>th</sup> Annual International Congress of British Association of Paediatric Surgeons (BAPS), Cambridge, 18-21 July 2002.
  32. **Keshtgar A.S.**, Clayden G.S., Ward H.C. Investigations for incontinence and constipation after surgery for Hirschsprung's disease. Presented at 47<sup>th</sup> Annual International Congress of British Association of Paediatric Surgeons (BAPS), Sorrento, Italy, 18-21 July 2000.
  33. **Keshtgar A.S.**, Puri P. Cystic hygroma and lymphangioma in children: Clinical course, surgical management and long-term outcome. Presented at 44<sup>th</sup> Annual International Congress of British Association of Paediatric Surgeons (BAPS), Istanbul, 22-25 July 1997.
  34. **Keshtgar A.S.**, Rickwood A.M.K. Urological consequences of incomplete cord lesions in patients with myelomeningocele Presented at 44<sup>th</sup> Annual International Congress of British Association of Paediatric Surgeons (BAPS), Istanbul, 22-25 July 1997.
  35. **Keshtgar A.S.**, Rintala R.J., Lamont G.A., Losty P.D., Lloyd D.A. Complications following fundoplication and gastrostomy in neurologically impaired children. Presented at 43<sup>rd</sup> Annual International Congress of British Association of Paediatric Surgeons (BAPS), Jersey, 16-19 July 1996.
  36. **Keshtgar A.S.**, Pierro A., Losty P.D., Lloyd D.A. Recent advances in the management of Peutz-Jeghers Syndrome in children. Presented at the 42<sup>nd</sup> Annual International Congress of British Association of Paediatric Surgeons (BAPS), 25-28 Sheffield, July 1995.
  37. **Keshtgar A.S.**, Fitzgerald R.J. Xanthogranuloma Pyelonephritis in children, a diagnostic dilemma. Presented at Annual meeting of Irish Paediatric Surgeons; Belfast, 23-24 April 1994.

## Invited presentations and lectures

1. Transcutaneous needle-free Injection of botulinum toxin into the external anal sphincter: A novel treatment for chronic idiopathic constipation in children. Presented at Royal Liverpool Children Hospital Alder Hey, Liverpool on 1<sup>st</sup> April 2009.
2. Use of Botulinum toxin in treatment of childhood constipation. Presented at International Joint Paediatric Surgical and Medical Chronic Constipation Seminar, Margate, 8-9 November 2007 and at Brats and the Royal London Hospital, NHS Trust on 21<sup>st</sup> October 2008.
3. Investigations of anorectal manometry, endosonography and colonic transit study in children with chronic idiopathic constipation. Presented at the International Joint Paediatric Surgical and Medical Chronic Constipation Seminar, Margate, 8-9 November 2007.
4. Common Elective and Acute Problems in the General Surgery of Childhood Course at the Royal College of Surgeons of England November 2006- November 2008

## Innovations

I have had several innovations listed below:

- 1. Transcutaneous needle-free injection of botulinum toxin into the external anal sphincter: A novel treatment for chronic idiopathic constipation and anal fissure in children.**

*Keshtgar A.S., Ward H.C. Clayden G.S. J Pediatr Surg. 2009 Sep; 44(9): 1791-8*

I developed the above innovative treatment for childhood constipation during my research work for PhD degree at Guy's and St Thomas' NHS Foundation Trust, London.

- 2. Awake anorectal manometry and biofeedback training and endosonography for chronic idiopathic constipation in children**

*Presented at 59<sup>th</sup> Annual International Congress of British Association of Paediatric Surgeons and European Association of Pediatric Surgeons in Rome, 13-16 June 2012.*

*Published in Journal of Pediatric Surgery, J Pediatr Surg. 2015 Mar;50(3):438-43.*

- 3. Anorectal manometry analyser software**

*Presented as a paper in 15<sup>th</sup> International Research Symposium in Pediatric Surgery, Marseille, 3- 4 October 2003.*

- 4. New method for calculation of colonic transit time**

I have developed a new method of calculating the colonic transit time, which was adopted from a formula proposed by Metcalf. The modified method includes calculation of colonic transit time based on a plain radiograph of abdomen taken on day 5 following ingestion of 10 different shapes radio-opaque markers for 3 consecutive days. This method measures the colonic transit time

reliably in constipated children, who have delayed total colonic transit time of more than 72 hours.

## **Grants**

I have led service improvement initiatives and successfully obtained grant of £120,000 to upgrade the anorectal manometry and endosonography systems and to set up the new services of oesophageal & colonic manometry in collaboration with gastroenterologist colleagues at Evelina Children's Hospital in July 2016.

I also obtained £5,000 grants from the Evelina Charitable Trust for clinical research and updating the computer system of anorectal manometry equipments at Guy's Hospital in 2002.