

3rd International Congress on Early Onset Scoliosis and Growing Spine (ICEOS)
 November 20-21, 2009
 Istanbul, Turkey
 Final Program

Friday, November 20, 2009

6:45 a.m.	Registration Open Breakfast Exhibit Viewing & Coffee in Exhibit Hall	Conrad Ballroom Foyer Manzara Restaurant Conrad Ballroom III
-----------	--	--

Session 1:	General Session	Conrad Ballroom I and II
-------------------	------------------------	---------------------------------

Moderators:	N. Suzuki, MD and G. Thompson, MD	
7:30	Welcome & Course Overview	B. Akbarnia, MD and M. Yazici, MD
7:35	Growth of the Spine and Thorax and Effect of Early Fusion	A. Dimeglio, MD
7:55	Growth Modulation	C. Johnston, MD
8:10	Growth of the Spinal Cord and when the Intraspinal Pathology should be Addressed	N. Akalan, MD
8:25	Pulmonary Consequences of TIS	G. Redding, MD
8:40	Discussion	
8:55	Terminology and Classification of EOS	B. Akbarnia, MD
9:05	Genetics	S. Shah, MD
9:15	Discussion	
9:25	Keynote Address: Early Onset Spinal Deformity in Developing Regions: What Options are Available?	Oheneba Boachie-Adjei, MD
9:45	Discussion	
9:50	Refreshment Break & Exhibit Viewing	Conrad Ballroom III

Session 2:	Free Papers	Conrad Ballroom I and II
-------------------	--------------------	---------------------------------

Moderators:	H. Noordeen, MD and G. Bollini, MD	
10:20	Paper # 1: Concurrent Tethered Cord Release and Growing Rod Insertion - Is it Safe? Jon Oda, MD; <u>Suken Shah, MD</u> ; William Mackenzie, MD	
10:24	Paper # 2: Distal Pedicle Screws Migration in Growing Rods, Does it Really Happen? <u>Hazem Elsebaie, FRCS, MD</u> ; Hossam Salah, MD FRCS(Eng)	
10:28	Paper # 3: Vertebral Body Growth During Growing Rod Instrumentation: Growth Preservation or Stimulation? Deniz Olgun, MD; Houman Ahmadiadli, MD; Ahmet Alanay, MD; <u>Muharrem Yazici, MD</u>	
10:32	Discussion	
10:40	Paper # 4 : Growing Rods for Spinal Deformity: Characterizing Consensus and Variation in Current Use Justin Yang, MD; Mark Mcelroy, MS; Behrooz Akbarnia, MD; Pooria Salari, MD; Daniel Oliveira, MD;	

GeorgeH. Thompson, MD; John Emans, MD; Muharrem Yazici, MD; David Skaggs, MD; Suken Shah, MD; Patricia Kostial, BS; Paul Sponseller, MD

10:44 Paper # 5 : Infantile Idiopathic Scoliosis; Variations in Preferred Treatment Options
Pooria Salari, MD; Daniel Oliveira, MD; Behrooz Akbarnia, MD; Paul Sponseller, MD; Gregory Mundis, MD; Growing Spine Study Group

10:48 Discussion

10:55 Case Discussions Moderator: C. Johnston, MD

Panelists: Drs. Blakemore, Campbell, Dimeglio, Flynn, Jensen, Lenke, Noordeen, Redding

11:40 Walking Break

11:50 Concurrent Technology Forums (with lunch)

Conrad Ballroom I & II

Title Case Studies: Overcoming Challengers in Pediatric Deformity Correction

Faculty: Lawrence Lenke, MD, Michael Vitale, MD and David Marks, FRCS

Supported by: Medtronic

Junior Ballroom A

VEPTR: A solution for chest wall and spinal deformity corrections

Faculty: Robert Campbell, MD

Supported by: Synthes

Junior Ballroom B

Multi-Axial Translation Technique in Deformity Correction

Faculty: Laurel Blakemore, MD

Supported by: K2M

1:15 p.m. Walking Break

Session 3: Outcomes – What is Considered a Successful Endpoint for EOS Treatment? Conrad Ballroom I and II

Moderators: M. Vitale, MD and M. Yazici, MD

1:25 Introduction and Outcome Measures for EOS M. Vitale, MD

1:35 Pulmonary Function G. Redding, MD

1:45 Non-operative Treatment J. Sanders, MD

1:55 Non-fusion Treatment (Is fusion surgery always the end point?) J. Flynn, MD

2:05 Complications – What is Acceptable with current techniques? L. Lenke, MD

2:15 The Psychosocial Impact of Multiple Surgeries R. Campbell, MD

2:25 Discussion

2:35 Free Papers Conrad Ballroom I and II

Moderators: L. Lenke, MD and D. Marks, FRCS

2:35 Paper # 6: CT Lung Volumes in EOS – Clinical Application and Early Results.

Charles Johnston, MD; Anna McClung, RN

2:39 Paper # 7 : Thoracic Function: A New Thoracic Performance Classification Based on Dynamic Lung MRI with Identification of a New Mechanism for Restrictive Lung Disease in EOS, Termed Posterior Obstructive Blockade

Robert Campbell, MD; Monica Epelman, MD; John Flynn, MD; Oscar Mayer, MD; Howard Panitch, MD; Michael Nance, MD; Thane Blinman; Joe McDonough, PhD

- 2:43 Paper # 8: Dynamic Thoracoplasty for Asphyxiating Thoracic Dystrophy using a Modular Distraction Device
Chukwudi Chukwunyerewa, MBBS, MRCSI; Damian McCormack, FRCS Orth, MCh
- 2:47 Discussion
- 2:55 Paper # 9: Atypical Usage of the VEPTR Implant for Chest Wall and Spinal Deformity
Kit Song, MD; John Waldhausen, MD; Gregory Redding, MD
- 2:59 Paper # 10: Airway Obstruction Secondary to Thoracolumbar Scoliosis: An Under-Recognized Complication
Gary McPhail, MD; Robert Wood; R. Boesch, DO, MS; Viral Jain, MD; Steven Agabegi; Eric Wall, MD; Alvin Crawford, MD
- 3:03 Discussion
- 3:10 Refreshment Break & Exhibit Viewing Conrad Ballroom III

Session 4: Debate: Kyphosis as a Contraindication for a Fusionless Procedure Conrad Ballroom I and II

Moderator: P. Sponseller, MD

- 3:30 Growing Rods can be used in patients with Kyphosis M. Yazici, MD
- 3:35 Growing Rods cannot be used in patients with Kyphosis G. Thompson, MD
- 3:40 VEPTR can be used in patients with Kyphosis M. Vitale, MD
- 3:45 VEPTR cannot be used in patients with Kyphosis H. Noordeen, MD
- 3:50 Rebuttal (2 min. each) M. Yazici, MD / G. Thompson, MD
- 3:54 Rebuttal (2 min. each) H. Noordeen, MD / M. Vitale, MD
- 3:58 Discussion

4:10 Free Papers Conrad Ballroom I and II

Moderators: A. Hamzaoglu, MD and B. Yaszay, MD

- 4:10 Paper # 11: Results and Complications of Kyphectomy (PVCR) for Pediatric Hyperkyphotic Spine Deformities (An SRS GOP Review of One Site)
Oheneba Boachie-adjei, MD; Elias Papadopoulos; Cristina Sacramento; Matthew Cunningham; Kenneth Paonessa; Yamuna Kanazawa; William Aibinder; Baron Lonner, MD; Francisco Javier S Perez-Grueso, MD; Michael Mendelow; Fred Hess; Munish Gupta; Howard Calder; Bettye Wright
- 4:14 Paper # 12: Growing Rods for Early Onset Scoliosis and Its Complications. A Retrospective Study of 129 Pts with 10 Yrs Follow-up
Milan Filipovič; Martin Repko; Miroslav Nýdrle; Milan Leznar
- 4:18 Paper # 13: Topical Negative Pressure Therapy for Wound Complications Following VEPTR Surgery
James Simmons III, DO, PhD; Vishwas Patil, MD; Ajeya Joshi, MD; Kent Reinker, MD; Robert Campbell, MD
- 4:22 Discussion

4:30	Paper # 14: Submuscular Growing Rods: Technique, Results and Complications of 88 Patients with Minimum 2-Year Follow-up <u>Suken Shah, MD</u> ; Najma Farooq, FRCS; Enrique Garrido, MRCS, EBOT; Stewart Tucker, FRCS; Hilali Noordeen, FRCS	
4:34	Paper # 15: Lengthening of Dual Growing Rods: Is there a Law of Diminishing Returns? Wudbhav Sankar; David Skaggs, MD; Muharrem Yazici, MD; Charles Johnston, MD; Pooya Javidan, BS; Rishi Kadakia; Thomas Day; <u>Behrooz Akbarnia, MD</u> ; Growing Spine Study Group	
4:38	Paper # 16: Effect of Anterior Instrumentation in Children age 1 and 2 Years on Spinal Canal Dimensions. <u>Hazem Elsebaie, FRCS, MD</u> ; Hossam Salah, MD FRCS(Eng); Hilali Noordeen, FRCS; Behrooz Akbarnia, MD	
4:42	Discussion	
4:50	Wine & Cheese Networking Reception in Exhibit Hall	Conrad Ballroom III
5:50	Adjourn	

Saturday, November 21, 2009

7:00 a.m. Exhibit Viewing & Coffee in Exhibit Hall Conrad Ballroom III

7:30 Concurrent Technology Forums (with Breakfast)

Conrad Ballroom I & II
Expedium 4.5 - Case Presentations and Live Sawbone Demonstration
Faculty: Behrooz Akbarnia, MD, David Marks, FRCS & Muharrem Yazici, MD
Supported by: DePuy

Junior Ballroom A
Casting Workshop
Faculty: James Sanders MD & Charles Johnston, MD
Supported by: Protex

Junior Ballroom B
Growth Strategies for Early Onset Scoliosis: State of the Art
Faculty: Michael Vitale, MD
Supported by: Stryker

8:55 Walking Break

Session 5: Focus Topic: Complications – How to Avoid Them and How to Manage Them Conrad Ballroom I and II

Moderators: J. Flynn, MD and F. Perez-Grueso, MD

9:05 Complications Related to Specific Diagnoses (OI, Syndromes, etc.) P. Sponseller, MD

9:20 Complications of VEPTR Anchors R. Campbell, MD

9:35 Complications of Anchors in the Growing Rod Technique B. Akbarnia, MD

9:50 Discussion

10:00 Complications Related to Sagittal Alignment L. Karlin, MD

10:15 Complications of Non-operative Management H. Elsebaie, MD

10:30 Complications – Revision Strategies in Cases Surgically Treated before the Age of 9 G. Bollini, MD

10:45 Discussion

10:55 Refreshment Break & Exhibit Viewing Conrad Ballroom III

Session 6: Free Papers Conrad Ballroom I and II

Moderators: L. Karlin, MD and H. Elsebaie, MD

11:20 Paper #17: Posterior Hemivertebra/Bar Resection and Segmental Instrumentation in the Treatment of Congenital Scoliosis at the Cervicothoracic Junction
Lynn Letko, MD; Rubens Jensen, MD; Juergen Harms, Prof. Dr. med

11:24 Paper #18: Management and surgical planning of severe infantile cervical kyphosis
Dezsoe Jeszenszky; Frank Kleinstueck; Tamas Fekete

11:28 Paper #19: Complex Cervico-Thoracic Deformities of Growing Spine: Surgical Results with Minimum Follow-up of Three Years
Nanjundappa Harshavardhana, MS (Orth); Mihir Bapat, MS(Orth); Kshitij Chaudhary, MS (Orth), DNB (Orth); Vinod Laheri, MS (Orth)

11:32	Discussion	
11:40	Paper #20: In vivo distraction force and length measurements of growing rods: Which factors influence on the ability to lengthen? <u>Suken Shah, MD</u> ; Enrique Garrido, MRCS, EBOT; Najma Farooq, FRCS; Stewart Tucker, FRCS; Hilali Noordeen, FRCS	
11:44	Paper #21: Porcine Model for Progressive Scoliosis: The Impact of Removing the Mechanical Tether <u>Ashish Patel, MD</u> ; Renaud Lafage, BS; Frank Schwab, MD; Jean-pierre Farcy, MD; Virginie Lafage, PhD	
11:48	Paper #22: Asymmetrical Flexible Tethering of the Spine in a Porcine Model <u>Neil Saran, MD, FRCS</u> ; Charles Johnston, MD; Hong Zhang, MD	
11:52	Discussion	

Debates:	Chest vs. Spine	Moderator: S. Shah, MD
-----------------	------------------------	-------------------------------

12:00 p.m.	Spine deformity has to be Primarily Corrected.	D. Marks FRCS and G. Mundis
12:10	Chest deformity has to be Primarily Corrected.	R. Campbell, MD and F. Perez-Grueso, MD
12:20	Rebuttal (2 min. each)	D. Marks FRCS and G. Mundis
12:24	Rebuttal (2 min. each)	R. Campbell, MD and F. Perez-Grueso, MD
12:28	Discussion	
12:40	Lunch	Manzara Restaurant

Session 7:	Myth Vs. Truth	Conrad Ballroom I and II
-------------------	-----------------------	---------------------------------

Moderators:	J. Sanders, MD and R. Jensen, MD	
1:30	Myth vs. Truth: Mehta Casts Always Work	H. Noordeen, MD
1:35	Myth vs Truth: Posterior Distraction Techniques are Kyphogenic	P. Sponseller, MD
1:40	Myth vs. Truth: Distraction Should be Done Every 6 Months with Distraction-based Methods	G. Thompson, MD
1:45	Myth vs Truth: Vertebral Resection and Short Fusion is Better than Non-fusion Techniques in Short Congenital Deformity	R. Jensen, MD
1:50	Myth vs. Truth: Final Fusion is Always Indicated in Non Fusion Surgery	F. Perez Grueso, MD
1:55	Discussion	
2:15	Myth vs. Truth: Growing Rods have Too Many Complications	N. Suzuki, MD
2:20	Myth vs. Truth: Screws are Always Superior to Hooks for GR Foundations	J. Flynn, MD
2:25	Myth vs. Truth: Apical correction is Important for Growing Instrumentations	A. Hamzaoglu, MD
2:30	Myth vs. Truth: VEPTRs are Too Bulky	M. Yazici, MD
2:35	Discussion	
2:50	Myth vs. Truth: VEPTRs Prevent Respiratory Sequelae of TIS	G. Redding, MD
2:55	Myth vs. Truth: VEPTRs Can Only Be Used for Chest Wall Problems	B. Yaszay, MD
3:00	Myth vs. Truth: Chest Expansion is Not Useful > 10 years due to Growth of Thorax	A. Dimeglio, MD

3:05	Discussion	
3:20	Refreshment Break & Exhibit Viewing	Conrad Ballroom III
Session 8: Free Papers Conrad Ballroom I and II		
Moderators:	R. Campbell, MD & A. Dimeglio, MD	
3:40	Paper #23: Natural History of Spine Associated With Esophageal Atresia – A Long-Term Population-Based Follow-Up Study Saara Sistonen, MD; <u>Ilkka Helenius, MD, PhD</u> ; Jari Peltonen, MD, PhD; Seppo Sarna, PhD; Risto Rintala, MD, Professor; Mikko Pakarinen, MD, PhD	
3:44	Paper #24: The Rib Vertebral Angle Difference – Is it a reliable measure? Jacqueline Corona, MD; James Sanders, MD; Scott Luhmann, MD; Michel Diab, MD; David P. Roye, Jr., MD; Hiroko Matsumoto, MA; <u>Michael Vitale, MD, MPH</u>	
3:48	Paper #25: Innovation in Growing Rod Technique; Study of Safety and Efficacy of Remotely Expandable Rod in Animal Model Behrooz Akbarnia, MD; <u>Gregory Mundis, MD</u> ; Pooria Salari, MD; Burt Yaszay, MD	
3:52	Discussion	
4:00	Paper #26: Pedicle and Vertebral Column Resections for Post-Tuberculous Pediatric Spinal Deformities: Surgical Results from a Single Center with Minimum Follow-up of Five Years <u>Nanjundappa Harshavardhana, MS (Orth)</u> ; Mihir Bapat, MS(Orth); Kshitij Chaudhary, MS (Orth), DNB (Orth); Vinod Laheri, MS (Orth)	
4:04	Paper #27: Convex Instrumented Hemiepiphysiodesis with Concave Distraction <u>Ozgur Dede, MD</u> ; Muharrem Yazici, M.D.; Ahmet Alanay, MD	
4:08	Paper #28: Results of Hemivertebra Excision for the Treatment of Congenital Scoliosis: A Multicenter Retrospective Review <u>Burt Yaszay, MD</u> ; Michael O'Brien, MD; Peter Newton, MD; Randal Betz, MD; Harry Shufflebarger, MD; Baron Lonner, MD; Lynn Letko, MD; Juergen Harms, Prof. Dr. med.; Alvin Crawford, MD; Suken Shah, MD; Paul Sponseller, MD; Michelle Marks, PT,MA	
4:12	Paper #29: Nutritional Improvement Following Growing Rod Surgery in Children with Early Onset Scoliosis Karen Myung, MD; David Skaggs, MD; George H. Thompson, MD; John Emans, MD; Paul Sponseller, MD; Lawrence Karlin, MD; Charles Johnston, MD; <u>Behrooz Akbarnia, MD</u> ; Growing Spine Study Group	
4:16	Discussion	
4:24	Case Discussions	Moderator: J. Flynn, MD
	Panelists: Drs. Bollini, Hamzaoglu, Marks, Shah, Suzuki, Yaszay, Johnston, El Sebaie	
5:20	Awards	M. Yazici, MD
5:25	Closing Comments	B. Akbarnia, MD
5:30	Adjourn	