



## International Consensus on Research Priorities in Hypospadias using a Delphi Study Approach

Tariq Abbas<sup>1, 2, 3\*</sup>, Renea Sturm<sup>4</sup>, Putu Angga Risky Raharja<sup>5</sup>,  
Grahame Smith<sup>6</sup>, Asma Jamil<sup>7</sup>, Fatima Chokr<sup>8</sup>

1. Urology Division, Department of Surgery, Sidra Medicine, Doha, Qatar
2. College of Medicine, Qatar University, Doha, Qatar
3. Weill Cornell Medicine - Qatar, Doha, Qatar
4. Department of Urology, David Geffen School of Medicine at UCLA, 10833 Le Conte Avenue Box 951738, Los Angeles, CA, 90095-1738, USA.
5. Department of Urology, Faculty of Medicine, Universitas Indonesia, Cipto Mangunkusumo Hospital, Jalan Diponegoro No. 71, Jakarta 10430, Indonesia
6. Department of Urology, The Sydney Childrens Hospital Network, Sydney, Australia.
7. Research Department, Sidra Medicine, Doha, Qatar
8. Department of Public Health, College of Health Sciences, QU Health, Qatar University, P.O. Box 2713, Doha, Qatar

### Correspondence to:

Dr. Tariq Osman ABBAS,  
Urology Division, Department of Surgery, Sidra Medicine, Doha, Qatar  
[Tariq2c@hotmail.com](mailto:Tariq2c@hotmail.com)

### Introduction

Hypospadias is a common congenital anomaly of the male genitalia that poses significant management and treatment challenges. Gaining a comprehensive understanding of priority research questions in hypospadiology will be essential to reach agreement on the optimal approach to assessment, treatment, and outcome prediction for affected patients.

### Methods

We employed a consensus-building Delphi method to identify and prioritize research questions in the hypospadias field. Additionally, we integrated questions sourced from the artificial intelligence platform ChatGPT to capture multiple perspectives. Engaging a diverse panel of experts including clinicians, researchers, and patient advocates from across the globe, the Delphi process aimed to distill collective expertise and insights through iterative rounds of structured questionnaires and feedback.

### Results

The analysis identified key themes in hypospadias research, covering etiology, tissue engineering, pre-clinical models, device/technology evaluation, phenotyping, surgical techniques, surgical training and postoperative outcomes. These themes highlight crucial areas for future investigation to improve understanding of hypospadias, treatment options, and patient outcomes, thereby guiding both research and clinical practice.



## **Discussion**

By harnessing the collective wisdom and perspectives of multiple stakeholders, this Delphi study establishes a roadmap for prioritizing research initiatives to effectively unravel the complexities of hypospadias. Integration of ChatGPT outputs into our Delphi-based approach also outlined how future studies can harness the collective wisdom of human experts together with artificial intelligence methods. The outcomes of this novel endeavor hold promise for shaping future research agendas, informing clinical practice guidelines, and fostering multidisciplinary collaborations to drive innovation and ultimately improve outcomes for hypospadias patients worldwide.



## CONCEPT OF ASOPA'S REPAIR IN PROXIMAL HYPOSPADIAS – ITS EVALUATION

**Author:** Dr. Kishore Panjwani

**Institute:** Asopa Hospital & Galaxy Hospital, Agra (India)

### **Aim of the Study**

The aim of this study is to evaluate the technical aspects of Asopa's Technique of Transprepuical Island Flap in the cases of proximal penile hypospadias with chordee and its complications in the initial phase and techniques gradual modification from time to time till today and to evaluate its long term result in the form anatomical, functional and psychosocial & sexual aspects.

### **Method**

Asopa's Technique was invented in 1971 in the era of multiple stage surgeries in the proximal penile hypospadias. This is retrograde evaluation of last five decades in the more than thousand cases. Age varies from 1yr to 40yrs & the outcome was evaluated in the three phases. First phase from 1971-1984 where Asopa – I technique was done, second phase from 1984-2000 in cases of proximal hypospadias with Asopa – II technique (double island flap). The third phase from 2000-till now with implications of Asopa – III technique.

### **Results**

Results were evaluated in four parts i.e. cosmesis, voiding function, psychosexual adjustment & sexual function. In the initial phase of 10-12yrs cosmetic results were not very promising as few percentage of patients were having penile torsion, urethral prolapse & diverticulum. All these complications were gradually reduced with time to time by modifications in the technique.

### **Discussion**

Asopa's transprepuical island tube urthroplasty was the most successful one stage technique in the era of multi stage surgeries for proximal penile hypospadias. Different modifications were done by other surgeons from time to time like Duckett's technique as TPIF repair in 1980, Hodgson XX technique, Dorsoventral Transfer of Preputial Tube Urethroplasty by Prof. Minu Bajpai & P. Frey's & Bianchi technique.

### **Conclusion**

This technique is excellent one stage technique in patients with proximal hypospadias with chordee. Can be performed easily by budding surgeons. Long term results are good in terms of cosmesis and voiding functions.



## **THE GUDPLAY TECHNIQUE: A SHIFT IN THE PARADIGM OF GLANS RECONSTRUCTION BY MIDSHAFT AND PENOSCROTAL HYPOSPADIAS: INTRODUCING A NEW APPROACH (VÍDEO)**

**Authors:** Gilmar DE OLIVEIRA GARRONE, Sérgio LEITE OTTONI, Marcela LEAL DA CRUZ, Raul GARCIA ARAGON, Rafael JORDAN BALLADARES, Taiane ROCHA CAMPELO, Renata ALVES CORREA, Emanuelle LIMA MACEDO and Antonio MACEDO JR.

**Affiliation:** FEDERAL UNIVERSITY OF SÃO PAULO, NUPEP/CACAU PEDIATRIC UROLOGY, São Paulo, BRAZIL

Presenter: Antônio Macedo Jr.

### **Aim of the Study**

Midshaft and penoscrotal hypospadias with moderate ventral curvature can be treated in one stage with preservation of urethral plate by a Duplay tubularization, an onlay flap or also an inlay graft and tubularization. After gaining 5 years experience with the GUD technique: glanular urethra disassembly for coronal and subcoronal hypospadias, we present the GUDplay technique, incorporating the Duplay tubularization of the plate till the coronal area and disassembling the glans aggressively, to treat the curvature and refurbish the glans and down rotating it (GUD).

### **Methods**

After penile degloving with an U-shape incision at the urethral plate, we dissect spongius flaps laterally to the plate as suggested by Bhat. We then disassembly the distal urethra or in this case the urethral plate to the corpora and completely detach the glans from the corpora. The glans is opened in an inverted Y incision in two wings, producing great mobility of the glans. Two anchor sutures are made with 5.0 PDS bringing the urethral plate cranially. A 6.0 PDS non interrupted running subepithelial suture is made to tubularize the plate and create the neourethra, followed by the spongioplasty and a dartos second barrier layer. The urethra is sutured to the glans and the wings are joined in the midline by 6.0 PDS sutures. An indwelling 10Fr silicone tube is left for 7-10 days

### **Results**

Patient had an excellent outcome without any complications

### **Discussion and Conclusion**

We believe that the GUDplay technique may be a promising alternative to midshaft and some penoscrotal hypospadias adding the GUD technique principles to the classic Duplay technique.