Pediatric Hypospadias Repair – a new consensus document on coding

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Teaser: Four Pediatric Specialty Societies reach a consensus on proper reporting of pediatric hypospadias repair

What is hypospadias?

Hypospadias is a male birth defect in which the opening of the tube that carries urine from the body (urethra) develops abnormally on the underside of the penis. The opening can occur anywhere from just below its normal location at the end of the penis to the perineum behind the scrotum. Hypospadias is often associated with a ventral curvature of the penis (penile chordee) or abnormal rotation of the penile shaft (penile torsion). Abnormal development of the scrotum (peno-scrotal fusion, bifid scrotum, or peno-scrotal transposition) may also be associated with hypospadias. Hypospadias most often occurs as an isolated birth defect without detectable abnormality of the remainder of the reproductive or endocrine system.

Hypospadias is not a uniform disorder which explains the plethora of CPT codes used to describe its surgical correction. In addition, over the past 20 years, a variety of creative surgical techniques have been incorporated with the traditional procedures to improve the surgical outcomes and cosmetic results. Distal and mid-shaft hypospadias is the most common type of hypospadias (in which the urethral orifice opens at the mid or distal shaft of the penis) and is usually corrected in a single surgical procedure (1 stage repair). Proximal and perineal hypospadias is less common and is often associated severe ventral penile curvature with or without abnormal scrotal development and may require surgical staging (2 stage repair) to correct.

Introduction

As a result of numerous questions received on the American Urological Association’s (AUA) Coding Hotline and since no consensus could be identified on the appropriate reporting of hypospadias repair, the AUA Coding and Reimbursement Committee convened a workgroup consisting of pediatric urologic experts from around the country to discuss coding guidelines for hypospadias reconstruction. Once the coding guidelines were defined, the AUA recommendations were vetted through members of the American Academy of Pediatric Urology (AAPU), Urology fellows of the American Academy of Pediatrics (AAP) and members of the Pediatric Urology Coordinating Council of the Society of Pediatric Urology (SPU). The most common comment concerned the correction of penile curvature or penile chordee. The correction of penile curvature has always been included in all primary codes and therefore should not be unbundled. The comments were then coordinated and included in the coding guidelines.
**Primary Procedure Codes**

Primary procedure codes represent the baseline or primary hypospadias repair code for either a 1 stage repair or the first or second stage of a planned 2 stage repair.

**Current Primary Procedure Codes**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>54304</td>
<td>Plastic operation on penis for correction of chordee or for first stage hypospadias repair with or without transplantation of prepuce and/or skin flaps</td>
</tr>
<tr>
<td>54308</td>
<td>Urethroplasty for second stage hypospadias repair (including urinary diversion); less than 3 cm.</td>
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<tr>
<td>54312</td>
<td>Urethroplasty for second stage hypospadias repair (including urinary diversion); greater than 3 cm.</td>
</tr>
<tr>
<td>54322</td>
<td>1-stage distal hypospadias repair (with or without chordee or circumcision); with simple meatal advancement (eg. Magpi, V-flap)</td>
</tr>
<tr>
<td>54324</td>
<td>1-stage distal hypospadias repair (with or without chordee or circumcision); with urethroplasty by local skin flaps (eg, flip-flap, prepucial flap)</td>
</tr>
<tr>
<td>54326</td>
<td>1-stage distal hypospadias repair (with or without chordee or circumcision); with urethroplasty by local skin flaps and mobilization of urethra.</td>
</tr>
<tr>
<td>54328</td>
<td>1-stage distal hypospadias repair (with or without chordee or circumcision); with extensive dissection to correct chordee and urethroplasty with local skin flaps, skin graft patch, and/or island flap.</td>
</tr>
<tr>
<td>54332</td>
<td>1-stage proximal penile or penoscrotal hypospadias repair requiring extensive dissection to correct chordee and urethroplasty by use of skin graft tube and/or island flap</td>
</tr>
<tr>
<td>54336</td>
<td>1-stage perineal hypospadias repair requiring extensive dissection to correct chordee and urethroplasty by use of skin graft tube and/or island flap.</td>
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**Secondary Procedure Codes**

Secondary procedure codes represent additional or adjunct procedures performed in conjunction with the primary procedure. These may include a variety of more recently described tissue flaps, grafts and scrotal procedures that have been developed and incorporated with the primary procedure. They are now routinely performed in hypospadias reconstruction to decrease surgical complications, decrease the need for revision surgery, and improve cosmetic outcomes.

**Secondary Flap Codes**

A variety of local flaps are now routinely used in hypospadias surgery to decrease complications and the rate of secondary surgery.
Code 15740

For primary codes 54328, 54332, and 54336, a de-epithelialized DARTOS ISLAND FLAP is included in the 1-stage repair and therefore secondary code 15740 (Flap; island pedicle requiring identification and dissection of anatomically named axial vessel) should not be additionally added or unbundled if this flap is used to cover the urethroplasty to prevent fistula formation. However, secondary code 15740 may be used for a TUNICA VAGINALIS FLAP for urethroplasty coverage for primary codes 54324, 54326, 54328, 54332, and 54336 as it is not the island flap referred to in the primary code.

Code 14040

Code 14040 can be added when a Byar’s flap (skin flap made of dorsal prepuce to resurface the ventral penis) is utilized when extensive reconfiguration of the dorsal prepuce is necessary to cover the skin defect on the ventral surface of the penis. Code 14040 can be added when a de-epithelialized scrotal flap is utilized to cover the urethroplasty to prevent fistula formation.

Secondary Graft Codes

A variety of grafts are now routinely used in hypospadias surgery to decrease complications and the rate of secondary surgery. Each secondary code when used should be clearly described and documented with the rational for its use (buccal mucosa for urethral reconstruction, dermis and SIS for corporal straightening as an example).

15240  Full thickness graft, free, including direct closure of donor site, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands, and/or feet; 20 sq cm or less (Buccal Graft)

15120  Split-thickness autograft, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; first 100 sq cm or less, or 1% of body area of infants and children

20926  Tissue grafts, other (eg, paratendon, fat, dermis) (Tissue graft harvest: Dermal Graft)

15777  Implantation of biologic implant (eg, acellular dermal matrix) for soft tissue reinforcement (eg, breast, trunk) (List separately in addition to code for primary procedure) [ Xenograft placement (SIS - Small Intestine Submucosa)]

Other Secondary Codes

55175  Scrotoplasty; simple

55180  Scrotoplasty; complicated

51102  Aspiration of bladder; with insertion of suprapubic catheter
**Recommended Coding Guidelines for Hypospadias Repair**

The recommendations are guidelines with a degree of latitude given the variability of associated anomalies found in conjunction with hypospadias (penile chordee or angulation, penile torsion, peno-scrotal fusion, bifid scrotum, peno-scrotal transposition). After careful review and discussion, a guideline for coding five TYPICAL clinical scenarios was developed for *INITIAL* surgical repairs. These guidelines are for *INITIAL* hypospadias repairs only and are not to be used for repair of hypospadias complications or *REVISION* surgery. Detailed documentation must support the use of EACH primary and secondary code (additional codes MAY be used as the guideline is not intended to include ALL codes given the variety of techniques utilized for hypospadias surgery). Additionally if possible, the medical rationale for the use of a secondary code to improve the outcome of the surgery is encouraged. Correction of penile chordee or penile curvature for ALL single stage repairs has always been included with all primary codes since their inception regardless of the technique used to effect penile straightening (additional codes such as 54300, 54304, or 54360 should not be added or unbundled for a dorsal plication stitch or a Nesbitt wedge as an example).

**SINGLE STAGE HYPOSPADIAS REPAIRS**

**Distal Hypospadias – Single Stage**

Clinical Vignette: The parents of a male with a distal shaft hypospadias request repair of the congenital anomaly. The parents have been counseled on the surgical risks, complications, benefits and alternatives to not having the procedure. The parents elect to proceed with the procedure.

Primary code (INCLUDES CHORDEE CORRECTION)

54322 1-stage distal hypospadias repair (with or without chordee or circumcision); with simple meatal advancement (eg. Magpi, V-flap)

OR

54324 1-stage distal hypospadias repair (with or without chordee or circumcision); with urethroplasty by local skin flaps (eg, flip-flap, prepucial flap)

Secondary codes if performed

15740 Flap; island pedicle requiring identification and dissection of anatomically named axial vessel, (Use selectively as described in the Introduction)

14040 Adjacent tissue transfer or rearrangement, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands and/or feet; defect 10 sq cm or less (Byar’s Flap)

15240 Full thickness graft, free, including direct closure of donor site, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands, and/or feet; 20 sq cm or less (Buccal Graft)
Clinical Vignette: The parents of a male with a mid-shaft hypospadias request repair of the congenital anomaly. The parents have been counseled on the surgical risks, complications, benefits and alternatives to not having the procedure. The parents elect to proceed with the procedure.

Primary Code

54324 1-stage distal hypospadias repair (with or without chordee or circumcision); with urethroplasty by local skin flaps (eg, flip-flap, prepuce flap)

OR

54326 1-stage distal hypospadias repair (with or without chordee or circumcision); with urethroplasty by local skin flaps and mobilization of urethra.

OR

54328 One stage distal hypospadias repair (with or without chordee or circumcision); with extensive dissection to correct chordee and urethroplasty with local skin flaps, skin graft patch, and/or island flap.

Secondary codes if performed

15740 Flap; island pedicle requiring identification and dissection of anatomically named axial vessel, (Use selectively as described in the Introduction)

15240 Full thickness graft, free, including direct closure of donor site, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands, and/or feet; 20 sq cm or less (Buccal Graft)

14040 Adjacent tissue transfer or rearrangement, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands and/or feet; defect 10 sq cm or less (Byar’s Flap)

55175 Scrotoplasty; simple

55180 Scrotoplasty; complicated

51102 Aspiration of bladder; with insertion of suprapubic catheter
Proximal Hypospadias – Single Stage (INCLUDES CHordee CORRECTION)

Clinical Vignette: The parents of a male with a proximal shaft hypospadias request repair of the congenital anomaly. The parents have been counseled on the surgical risks, complications, benefits and alternatives to not having the procedure. The parents elect to proceed with the procedure.

Primary Code (INCLUDES CHordee CORRECTION)

54332  One stage proximal penile or penoscrotal hypospadias repair requiring extensive dissection to correct chorddee and urethroplasty by use of skin graft tube and/or island flap

OR

54336  One stage perineal hypospadias repair requiring extensive dissection to correct chorddee and urethroplasty by use of skin graft tube and/or island flap.

Secondary codes if performed

15740  Flap; island pedicle requiring identification and dissection of anatomically named axial vessel, (Use selectively as described in the Introduction)

15240  Full thickness graft, free, including direct closure of donor site, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands, and/or feet; 20 sq cm or less (Buccal Graft)

55175  Scrotoplasty; simple

55180  Scrotoplasty; complicated

51102  Aspiration of bladder; with insertion of suprapubic catheter

TWO STAGE HYPOSPADIAS REPAIRS

Proximal 1st Stage Repair of planned 2- stage repair

Clinical Vignette: The parents of a male with a proximal shaft hypospadias request repair of the congenital anomaly. In the opinion of the attending surgeon, the severity of the hypospadias and its associated penile chorddee and scrotal malformation is such that the surgery will require 2 separate surgical settings (2 stage) to obtain an optimal outcome. The parents have been counseled on the surgical risks, complications, benefits and alternatives to not having the procedure. The parents elect to proceed with the procedure.

Primary Code

54304  Plastic operation on penis for correction of chorddee or for first stage hypospadias repair with or without transplantation of prepuce and/or skin flaps
Secondary codes if performed

14040 Adjacent tissue transfer or rearrangement, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands and/or feet; defect 10 sq cm or less (Byar’s Flap)

15120 Split-thickness autograft, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; first 100 sq cm or less, or 1% of body area of infants and children

15240 Full thickness graft, free, including direct closure of donor site, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands, and/or feet; 20 sq cm or less (Buccal Graft)

15740 Flap; island pedicle requiring identification and dissection of anatomically named axial vessel

15777 Implantation of biologic implant (eg, acellular dermal matrix) for soft tissue reinforcement (eg, breast, trunk) (List separately in addition to code for primary procedure) [ Xenograft placement (SIS - Small Intestine Submucosa)]

20926 Tissue graft harvest (Dermal Graft)

55175 Scrotoplasty; simple

55180 Scrotoplasty; complicated

51102 Aspiration of bladder; with insertion of suprapubic catheter

Proximal 2nd Stage Repair of planned 2- stage repair

Clinical Vignette: The parents of a male with a proximal shaft hypospadias who has already undergone a 1st stage of a planned 2 stage repair request the second surgical repair. The parents have been counseled on the surgical risks, complications, benefits and alternatives to not having the procedure. The parents elect to proceed with the procedure.

Primary Code

54308 Urethroplasty for second stage hypospadias repair (including urinary diversion); less than 3 cm.

OR

54312 Urethroplasty for second stage hypospadias repair (including urinary diversion); greater than 3 cm.

Secondary codes if performed

14040 Adjacent tissue transfer or rearrangement, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands and/or feet; defect 10 sq cm or less (Byar’s Flap)

15120 Split-thickness autograft, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; first 100 sq cm or less, or 1% of body area of infants and children
15240 Full thickness graft, free, including direct closure of donor site, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands, and/or feet; 20 sq cm or less (Buccal Graft)

15740 Flap; island pedicle requiring identification and dissection of anatomically named axial vessel, (Use selectively as described in the Introduction)

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55175 Scrotoplasty; simple

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51102 Aspiration of bladder; with insertion of suprapubic catheter

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