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# Medical Policy

# Injectable Bulking Agents for the Treatment of Urinary and Fecal Incontinence

## **Table of Contents**

- Policy: Commercial
- Coding Information
- Information Pertaining to All Policies

- Policy: Medicare
- Description
- References

- Authorization Information
- Policy History

# **Policy Number: 471**

BCBSA Reference Number: 7.01.19 (For internal use only)

## **Related Policies**

- Biofeedback as a Treatment of Fecal Incontinence or Constipation #308
- Biofeedback as a Treatment of Urinary Incontinence #173
- Pelvic Floor Stimulation as a Treatment of Urinary and Fecal Incontinence #470
- Percutaneous Tibial Nerve Stimulation for Voiding Dysfunction, #583
- Sacral Nerve Neuromodulation/Stimulation #153
- Transanal Radiofrequency Treatment of Fecal Incontinence #309

## **Policy**

# Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity

## **Urinary Incontinence**

The use of carbon-coated spheres, calcium hydroxylapatite, polyacrylamide hydrogel or polydimethylsiloxane may be considered <u>MEDICALLY NECESSARY</u> to treat stress urinary incontinence in members who have failed appropriate conservative therapy.

The use of autologous cellular therapy (e.g., myoblasts, fibroblasts, muscle-derived stem cells, adiposederived stem cells), autologous fat, and autologous ear chondrocytes to treat stress urinary incontinence is considered **INVESTIGATIONAL**.

The use of any other periurethral bulking agent, including, but not limited to Teflon, to treat stress urinary incontinence is considered **INVESTIGATIONAL**.

The use of periurethral bulking agents to treat urge urinary incontinence is considered **INVESTIGATIONAL**.

## **Fecal Incontinence**

The use of perianal bulking agents to treat fecal incontinence is considered **INVESTIGATIONAL**.

## **Prior Authorization Information**

### Inpatient

 For services described in this policy, precertification/preauthorization <u>IS REQUIRED</u> for all products if the procedure is performed <u>inpatient</u>.

#### Outpatient

• For services described in this policy, see below for products where prior authorization <u>might be</u> <u>required</u> if the procedure is performed <u>outpatient</u>.

	Outpatient
Commercial Managed Care (HMO and POS)	Prior authorization is <b>not required</b> .
Commercial PPO and Indemnity	Prior authorization is <b>not required</b> .

## **CPT Codes / HCPCS Codes / ICD Codes**

Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

The above <u>medical necessity criteria MUST</u> be met for the following codes to be covered for Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity:

## **CPT Codes**

CPT codes:	Code Description	
	Endoscopic injection of implant material into the submucosal tissues of the urethra	
51715	and/or bladder neck	

## **HCPCS Codes**

HCPCS codes:	Code Description
L8603	Injectable bulking agent, collagen implant, urinary tract, 2.5 ml syringe, includes shipping and necessary supplies
L8606	Injectable bulking agent synthetic implant, urinary tract, 1 ml syringe, includes shipping and necessary supplies

The following ICD Diagnosis Codes are considered medically necessary when submitted with the CPT and HCPCS codes above if <u>medical necessity criteria</u> are met:

# **ICD-10 Diagnosis Codes**

ICD-10-CM	
Diagnosis codes:	Code Description
N36.43	Combined hypermobility of urethra and intrinsic sphincter deficiency
N39.3	Stress incontinence (female) (male)
N39.42	Incontinence without sensory awareness
N39.43	Post-void dribbling
N39.44	Nocturnal enuresis
N39.45	Continuous leakage
N39.490	Overflow incontinence
N39.498	Other specified urinary incontinence
R32	Unspecified urinary incontinence

The following CPT and HCPCS codes are considered investigational for <u>Commercial Members:</u> Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:

## **HCPCS Codes**

HCPCS codes:	Code Description
L8605	Injectable bulking agent, dextranomer/hyaluronic acid copolymer implant, anal canal,
	1 ml, includes shipping and necessary supplies

# **Description**

## Incontinence

Incontinence, especially urinary, is a common condition and can have a substantial impact on quality of life. Estimates from the National Center for Health Statistics have suggested that, among noninstitutionalized persons 65 years of age and older, 44% have reported issues with urinary incontinence and 17% issues with fecal incontinence. 1.

## **Treatment**

### **Urinary Incontinence**

Injectable bulking agents are space-filling substances used to increase tissue bulk. When used to treat stress urinary incontinence (SUI), bulking agents are injected periurethrally to increase tissue bulk and thereby increase resistance to the outflow of urine. The bulking agent is injected into the periurethral tissue as a liquid that solidifies into a spongy material to bulk the urethral wall. Bulking agents may be injected over a course of several treatments until the desired effect is achieved. Periurethral bulking agents have been widely used for incontinence in women. Men have also been treated, typically those with postprostatectomy incontinence.

Key factors in determining the optimal product are biocompatibility, durability, and absence of migration. A number of periurethral bulking agents to treat urinary incontinence have been cleared for marketing by the U.S. Food and Drug Administration (FDA); however, products developed to date have not necessarily met all criteria of the ideal bulking agents. The first FDA approved product was cross-linked collagen (eg, Contigen). The agent was found to be absorbed over time and symptoms could recur, requiring additional injections. Contigen production was discontinued in 2011. Other periurethral bulking agents cleared by FDA for urinary incontinence include carbon-coated beads (eg, Durasphere), spherical particles of calcium hydroxylapatite (CaHA®) in a gel carrier (Coaptite®), polydimethylsiloxane (silicone, Macroplastique®), cross-linked polyacrylamide hydrogel (Bulkamid®), and ethylene vinyl alcohol copolymer implants (eg, Tegress®, formerly Uryx®). Tegress was voluntarily removed from the market due to safety concerns.

## **Fecal Incontinence**

After the success of periurethral bulking agents for treating SUI, bulking agents injected into the anal canal have been proposed to treat fecal incontinence. In particular, bulking agents are a potential treatment for passive fecal incontinence associated with internal anal sphincter dysfunction. The bulking agent is injected into the submucosa of the anal canal to increase tissue bulk in the area, which narrows the opening of the anus. Current treatment options for fecal incontinence include conservative measures (eg, dietary changes, pharmacotherapy, pelvic floor muscle exercises), sacral nerve stimulation, and surgical interventions to correct an underlying problem.

Several agents identical or similar to those used for urinary incontinence (eg, Durasphere, silicone biomaterial) have been studied for the treatment of fecal incontinence. To date, only 1 bulking agent has been approved by the FDA for fecal incontinence. This formulation is a non-animal-stabilized hyaluronic acid/dextranomer in stabilized hyaluronic acid (NASHA Dx), marketed by Palette Life Sciences as Solesta. A hyaluronic acid/dextranomer formulation (Deflux®TM) from the same company has been commercially available for a number of years for the treatment of vesicoureteral reflux in children (see evidence review 7.01.102 on the treatment of vesicoureteral reflux with bulking agents).

Autologous fat and autologous ear chondrocytes have also been used as periurethral bulking agents; autologous substances do not require FDA approval. Polytetrafluoroethylene (Teflon®) has been

investigated as an implant material but does not have FDA approval. A more recently explored alternative is cellular therapy with myoblasts, fibroblasts, or stem cells (muscle-derived or adipose-derived). In addition to their use as periurethral bulking agents, it has been hypothesized that transplanted stem cells would undergo self-renewal and multipotent differentiation, which could result in the regeneration of the sphincter and its neural connections.

# **Summary**

## Description

Bulking agents are injectable substances used to increase tissue bulk. They can be injected periurethrally to treat urinary incontinence and perianally to treat fecal incontinence. The U.S. Food and Drug Administration (FDA) has approved several bulking agent products for treating urinary incontinence and one for treating fecal incontinence.

## **Summary of Evidence**

For individuals who have stress urinary incontinence (SUI) who receive injectable bulking agents, the evidence includes randomized controlled trials (RCTs) and systematic reviews of RCTs. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. The trials vary by bulking agents used and comparator interventions (eg, placebo, conservative therapy, surgical procedure, another bulking agent). Due to this heterogeneity across studies, and the small number of studies in each category, Cochrane reviewers were unable to draw specific conclusions about the efficacy of specific bulking agents compared with alternative treatments. Additionally, authors of another recent systematic review concluded that bulking agents were less effective than surgical procedures regarding subjective improvement after treatment, with no difference between the interventions with regard to complications. Studies have shown that cross-linked collagen improves the net health outcome (ie, it is effective in some patients who have failed conservative treatment with fewer adverse events than surgery). although products that cross-link in such a way are no longer commercially available. There is evidence that the FDA approved carbon-coated spheres, calcium hydroxylapatite, polyacrylamide hydrogel and polydimethylsiloxane have efficacy for treating incontinence, and further that they produce outcomes with a safety profile similar to cross-linked collagen. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have fecal incontinence who receive injectable bulking agents, the evidence includes RCTs and systematic reviews of RCTs. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. A comparative effectiveness review from the Agency for Healthcare Research and Quality evaluated 2 RCTs with the FDA approved product NASHA Dx (Solesta) and 2 RCTs with Durasphere (off-label in the United States). One RCT comparing NASHA Dx with sham found that NASHA Dx improved some outcomes but not others. The other RCT did not find a significant difference in efficacy between NASHA Dx and biofeedback. Two additional RCTs evaluating Durasphere found only short-term improvements in fecal incontinence severity. Controlled trials with longer follow-up are needed to determine the durability of any treatment effect. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

# **Policy History**

Date	Action
12/2023	Annual policy review. Policy updated with literature review through August 30, 2023;
	references added. Policy statements unchanged.
12/2022	Annual policy review. Description, summary, and references updated. Policy
	statements unchanged.
3/2022	Annual policy review. Medically necessary policy statement in men and women with
	stress urinary incontinence who have failed appropriate conservative therapy expanded
	to include polyacrylamide hydrogel, which is now FDA approved. Effective 3/1/2022.
1/2021	Medicare information removed. See MP #132 Medicare Advantage Management for
	local coverage determination and national coverage determination reference.
10/2020	Annual policy review. Description, summary, and references updated. Policy
	statements unchanged.
1/2020	Clarified coding information.

10/2019	Annual policy review. Description, summary and references updated. Policy statements unchanged.
11/2018	Annual policy review. No changes to policy statements. New references added.  Background and summary clarified. 11/2018
10/2018	Annual policy review. No changes to policy statements. New references added. Background and summary clarified.
9/2017	Annual policy review. New references added.
10/2016	Annual r policy review. New references added.
8/2015	Annual policy review. Contigen removed from medically necessary statement as it is no longer available. Clarified coding information. Effective 8/1/2015.
1/2015	Clarified coding information.
7/2014	Updated Coding section with ICD10 procedure and diagnosis codes, effective 10/2015.
5/2014	Annual policy review. New references added.
11/2013	Removed HCPCS codes L8604, Q3031 and diagnosis code 788.33 as they do not meet the intent of the policy.
9/2013	Annual policy review. New investigational indications described. Effective 9/1/2013.
11/2011-	Medical policy ICD 10 remediation: Formatting, editing and coding updates. No
4/2012	changes to policy statements.
9/2011	Reviewed - Medical Policy Group - Urology and Obstetrics/Gynecology. No changes to policy statements.
6/2010	Reviewed - Medical Policy Group - Urology and Obstetrics/Gynecology. No changes to policy statements.
6/2010	Reviewed - Medical Policy Group - Urology and Obstetrics/Gynecology. No changes to policy statements.
1/2010	BCBSA National medical policy review. No changes to policy statements.
6/2009	Reviewed - Medical Policy Group - Urology and Obstetrics/Gynecology. No changes to policy statements.
6/2008	Reviewed - Medical Policy Group - Urology and Obstetrics/Gynecology. No changes to policy statements.
5/2008	Annual policy review. No changes to policy statements.
8/2007	Annual policy review. Changes to policy statements.

## Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

Medical Policy Terms of Use

Managed Care Guidelines

Indemnity/PPO Guidelines

**Clinical Exception Process** 

Medical Technology Assessment Guidelines

## References

- 1. Gorina Y, Schappert S, Bercovitz A, et al. Prevalence of incontinence among older americans. Vital Health Stat 3. Jun 2014; (36): 1-33. PMID 24964267
- 2. Agency for Health Care Policy and Research. Clinical Practice Guideline. Urinary Incontinence in Adults. Rockville, MD: Department of Health and Human Services; 1996.
- 3. Corcos J, Collet JP, Shapiro S, et al. Multicenter randomized clinical trial comparing surgery and collagen injections for treatment of female stress urinary incontinence. Urology. May 2005; 65(5): 898-904. PMID 15882720
- 4. Hoe V, Haller B, Yao HH, et al. Urethral bulking agents for the treatment of stress urinary incontinence in women: A systematic review. Neurourol Urodyn. Aug 2021; 40(6): 1349-1388. PMID 34015151
- 5. Pivazyan L, Kasyan G, Grigoryan B, et al. Effectiveness and safety of bulking agents versus surgical methods in women with stress urinary incontinence: a systematic review and meta-analysis. Int Urogynecol J. Apr 2022; 33(4): 777-787. PMID 34351463
- 6. Kirchin V, Page T, Keegan PE, et al. Urethral injection therapy for urinary incontinence in women. Cochrane Database Syst Rev. Jul 25 2017; 7(7): CD003881. PMID 28738443

- 7. Kirchin V, Page T, Keegan PE, et al. Urethral injection therapy for urinary incontinence in women. Cochrane Database Syst Rev. Feb 15 2012; (2): CD003881. PMID 22336797
- 8. Davila GW. Nonsurgical outpatient therapies for the management of female stress urinary incontinence: long-term effectiveness and durability. Adv Urol. 2011; 2011: 176498. PMID 21738529
- 9. Lightner D, Calvosa C, Andersen R, et al. A new injectable bulking agent for treatment of stress urinary incontinence: results of a multicenter, randomized, controlled, double-blind study of Durasphere. Urology. Jul 2001; 58(1): 12-5. PMID 11445471
- Mayer RD, Dmochowski RR, Appell RA, et al. Multicenter prospective randomized 52-week trial of calcium hydroxylapatite versus bovine dermal collagen for treatment of stress urinary incontinence. Urology. May 2007; 69(5): 876-80. PMID 17482925
- 11. Sokol ER, Karram MM, Dmochowski R. Efficacy and safety of polyacrylamide hydrogel for the treatment of female stress incontinence: a randomized, prospective, multicenter North American study. J Urol. Sep 2014: 192(3): 843-9. PMID 24704117
- 12. Itkonen Freitas AM, Mentula M, Rahkola-Soisalo P, et al. Tension-Free Vaginal Tape Surgery versus Polyacrylamide Hydrogel Injection for Primary Stress Urinary Incontinence: A Randomized Clinical Trial. J Urol. Feb 2020; 203(2): 372-378. PMID 31479396
- 13. Pai A, Al-Singary W. Durability, safety and efficacy of polyacrylamide hydrogel (Bulkamid(®)) in the management of stress and mixed urinary incontinence: three year follow up outcomes. Cent European J Urol. 2015; 68(4): 428-33. PMID 26855795
- 14. Lose G, Sørensen HC, Axelsen SM, et al. An open multicenter study of polyacrylamide hydrogel (Bulkamid®) for female stress and mixed urinary incontinence. Int Urogynecol J. Dec 2010; 21(12): 1471-7. PMID 20645077
- 15. Leone Roberti Maggiore U, Alessandri F, Medica M, et al. Outpatient periurethral injections of polyacrylamide hydrogel for the treatment of female stress urinary incontinence: effectiveness and safety. Arch Gynecol Obstet. Jul 2013: 288(1): 131-7. PMID 23371485
- Mouritsen L, Lose G, Møller-Bek K. Long-term follow-up after urethral injection with polyacrylamide hydrogel for female stress incontinence. Acta Obstet Gynecol Scand. Feb 2014; 93(2): 209-12. PMID 24372312
- 17. Ghoniem G, Corcos J, Comiter C, et al. Cross-linked polydimethylsiloxane injection for female stress urinary incontinence: results of a multicenter, randomized, controlled, single-blind study. J Urol. Jan 2009; 181(1): 204-10. PMID 19013613
- 18. Ghoniem G, Corcos J, Comiter C, et al. Durability of urethral bulking agent injection for female stress urinary incontinence: 2-year multicenter study results. J Urol. Apr 2010; 183(4): 1444-9. PMID 20171691
- Lightner D, Rovner E, Corcos J, et al. Randomized controlled multisite trial of injected bulking agents for women with intrinsic sphincter deficiency: mid-urethral injection of Zuidex via the Implacer versus proximal urethral injection of Contigen cystoscopically. Urology. Oct 2009; 74(4): 771-5. PMID 19660800
- 20. Chapple CR, Haab F, Cervigni M, et al. An open, multicentre study of NASHA/Dx Gel (Zuidex) for the treatment of stress urinary incontinence. Eur Urol. Sep 2005; 48(3): 488-94. PMID 15967568
- 21. Lone F, Sultan AH, Thakar R. Long-term outcome of transurethral injection of hyaluronic acid/dextranomer (NASHA/Dx gel) for the treatment of stress urinary incontinence (SUI). Int Urogynecol J. Nov 2010; 21(11): 1359-64. PMID 20571764
- 22. Lee PE, Kung RC, Drutz HP. Periurethral autologous fat injection as treatment for female stress urinary incontinence: a randomized double-blind controlled trial. J Urol. Jan 2001; 165(1): 153-8. PMID 11125386
- 23. Bent AE, Tutrone RT, McLennan MT, et al. Treatment of intrinsic sphincter deficiency using autologous ear chondrocytes as a bulking agent. Neurourol Urodyn. 2001; 20(2): 157-65. PMID 11170190
- 24. Strasser H, Marksteiner R, Margreiter E, et al. Autologous myoblasts and fibroblasts versus collagen for treatment of stress urinary incontinence in women: a randomised controlled trial. Lancet. Jun 30 2007; 369(9580): 2179-2186. PMID 17604800
- Kleinert S, Horton R. Retraction--autologous myoblasts and fibroblasts versus collagen [corrected] for treatment of stress urinary incontinence in women: a [corrected] randomised controlled trial. Lancet. Sep 06 2008; 372(9641): 789-90. PMID 18774408
- 26. Peters KM, Dmochowski RR, Carr LK, et al. Autologous muscle derived cells for treatment of stress urinary incontinence in women. J Urol. Aug 2014; 192(2): 469-76. PMID 24582537

- 27. Jankowski RJ, Tu LM, Carlson C, et al. A double-blind, randomized, placebo-controlled clinical trial evaluating the safety and efficacy of autologous muscle derived cells in female subjects with stress urinary incontinence. Int Urol Nephrol. Dec 2018; 50(12): 2153-2165. PMID 30324580
- 28. Forte ML, Andrade KE, Butler M, et al. Treatments for Fecal Incontinence (Comparative Effectiveness Review No. 165). Rockville, MD: Agency for Healthcare Research and Quality; 2016.
- 29. Maeda Y, Laurberg S, Norton C. Perianal injectable bulking agents as treatment for faecal incontinence in adults. Cochrane Database Syst Rev. Feb 28 2013; (2): CD007959. PMID 23450581
- 30. Graf W, Mellgren A, Matzel KE, et al. Efficacy of dextranomer in stabilised hyaluronic acid for treatment of faecal incontinence: a randomised, sham-controlled trial. Lancet. Mar 19 2011; 377(9770): 997-1003. PMID 21420555
- 31. Mellgren A, Matzel KE, Pollack J, et al. Long-term efficacy of NASHA Dx injection therapy for treatment of fecal incontinence. Neurogastroenterol Motil. Aug 2014; 26(8): 1087-94. PMID 24837493
- 32. Dehli T, Stordahl A, Vatten LJ, et al. Sphincter training or anal injections of dextranomer for treatment of anal incontinence: a randomized trial. Scand J Gastroenterol. Mar 2013; 48(3): 302-10. PMID 23298304
- 33. La Torre F, de la Portilla F. Long-term efficacy of dextranomer in stabilized hyaluronic acid (NASHA/Dx) for treatment of faecal incontinence. Colorectal Dis. May 2013; 15(5): 569-74. PMID 23374680
- 34. Quiroz LH, Galliano DE, da Silva G, et al. Efficacy and Safety of a Nonanimal Stabilized Hyaluronic Acid/Dextranomer in Improving Fecal Incontinence: A Prospective, Single-Arm, Multicenter, Clinical Study With 36-Month Follow-up. Dis Colon Rectum. Feb 01 2023; 66(2): 278-287. PMID 35001051
- 35. American College of Obstetricians and Gynecologists (ACOG). Practice Bulletin No. 155: Urinary Incontinence in Women. Obstet Gynecol. May 2016;127(5):e66-81. PMID 27548423
- 36. Kobashi KC, Albo ME, Dmochowski RR, et al. Surgical Treatment of Female Stress Urinary Incontinence: AUA/SUFU Guideline. J Urol. Oct 2017; 198(4): 875-883. PMID 28625508
- 37. Kobashi KC, Vasavada S, Bloschichak A, et al. Updates to Surgical Treatment of Female Stress Urinary Incontinence (SUI): AUA/SUFU Guideline (2023). J Urol. Jun 2023; 209(6): 1091-1098. PMID 37096580
- 38. National Institute for Health and Care Excellence (NICE). Urinary incontinence and pelvic organ prolapse in women: management [NG123]. 2019; https://www.nice.org.uk/guidance/ng123. Accessed September 5, 2023.
- 39. ACOG Practice Bulletin No. 210: Fecal Incontinence. Obstet Gynecol. Apr 2019; 133(4): e260-e273. PMID 30913197
- Bharucha AE, Rao SSC, Shin AS. Surgical Interventions and the Use of Device-Aided Therapy for the Treatment of Fecal Incontinence and Defecatory Disorders. Clin Gastroenterol Hepatol. Dec 2017; 15(12): 1844-1854. PMID 28838787
- 41. Bordeianou LG, Thorsen AJ, Keller DS, et al. Management of fecal incontinence. Dis Colon Rectum. 2023;66:637-661.
- 42. National Institute for Health and Care Excellence (NICE). Injectable bulking agents for faecal incontinence [IPG210]. 2007; https://www.nice.org.uk/guidance/ipg210/chapter/1-guidance. Accessed September 4, 2023.