MEDICAL POLICY



MEDICAL POLICY DETAILS		
Medical Policy Title	COLLAGENASE CLOSTRIDIUM HISTOLYTICUM (XIAFLEX) FOR	
	FIBROPROLIFERATIVE DISORDERS	
Policy Number	5.01.15	
Category	Technology Assessment	
Effective Date	06/17/10	
Revised Date	08/18/11, 01/19/12, 12/20/12, 12/19/13, 01/22/15, 02/18/16, 03/16/17, 02/15/18, 03/21/19	
Product Disclaimer	• If a product excludes coverage for a service, it is not covered, and medical policy criteria do not apply.	
	• If a commercial product (including an Essential Plan product) or a Medicaid product covers a specific service, medical policy criteria apply to the benefit.	
	• If a Medicare product covers a specific service, and there is no national or local Medicare coverage decision for the service, medical policy criteria apply to the benefit.	

POLICY STATEMENT

- I. Based upon our criteria and assessment of peer-reviewed literature, up to three injections of collagenase clostridium (e.g., Xiaflex) has been medically proven effective and therefore can be considered as a **medically appropriate** treatment option in the management of adults with Dupuytren's contracture in either the metacarpophalangeal (MCP) or proximal interphalangeal (PIP) joint when there is a palpable palmer cord.
- II. Based upon our criteria and assessment of peer-reviewed literature, injectable collagenase clostridium (e.g., Xiaflex) has not been medically proven to be effective and is considered **investigational** for all other indications, including, but not limited to, Peyronie's disease and adhesive capsulitis of the shoulder.

POLICY GUIDELINES

- I. Collagenase clostridium is administered at four-week intervals for a total of three injections (0.58 mg) per cord. Each injection is followed by manual manipulation of the affected joint.
- II. The Federal Employee Health Benefit Program (FEHBP/FEP) requires that procedures, devices or laboratory tests approved by the U.S. Food and Drug Administration (FDA) may not be considered investigational and thus these procedures, devices or laboratory tests may be assessed only on the basis of their medical necessity.

DESCRIPTION

Fibroproliferative disorders, characterized by excessive collagen deposits, can affect the musculoskeletal system causing pain, limiting joint range of motion and negatively impacting quality of life. Examples of these fibrotic tissue disorders include Dupuytren's contracture, adhesive capsulitis and Peyronie's disease.

Collagenases, enzymes that digest native collagen and lead to the disruption of contracted cords, are being investigated as a non-surgical treatment for fibroproliferative disorders. Injection of collagenase clostridium histolyticum, a bacterial collagenase, is intended to provide a non-operative treatment option and is usually an office-based procedure. Its use in the treatment of Dupuytren's contracture has been the most widely studied. Therapy consists of up to three injections into a palpable cord, at 4-week intervals followed by manual manipulation of the affected joint to attempt rupture of the cord.

RATIONALE

In February 2010, the FDA approved Auxilium Pharmaceutical Inc.'s biologics license application for clostridium collagenase histolyticum (Xiaflex) for treatment of adult patients with Dupuytren's contracture with a palpable cord. The FDA labeling for Xiaflex states that up to three (3) injections at 4-week intervals may be given into a palpable Dupuytren's cord with a contracture of a metacarpophalangeal (MP) joint or a proximal interphalangeal (PIP) joint. The FDA expanded the indications (October 2014) for Xiaflex for Dupuytren's contracture to allow up to two (2) joints to be

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injected in the same hand during one (1) treatment visit. The expanded indications were partially based on data from the MULTICORD study (RG Gaston, et al. 2015). The MULTICORD study enrolled 715 patients (725 treated joint pairs), and 714 patients (724 joint pairs) were analyzed for efficacy. At day 31, mean total fixed flexion contracture (sum of 2 treated joints) decreased 74%, from 98° to 27°. Mean total range of motion increased from 90° to 156°. The incidence of clinical success was 65% in metacarpophalangeal joints and 29% in proximal interphalangeal joints. Most treatment-related AEs were mild to moderate, resolving without intervention; the most common were swelling of treated extremity, contusion, and pain in extremity.

While the evidence of long-term recurrence rates is not yet available, the outcomes from clinical trials thus far suggest that injectable collagenase clostridium provides short-term release of contracture in patients with Dupuytren's disease. Longer-term studies and comparative studies to surgical intervention are still needed to determine the overall safety and effectiveness of this therapy. Five-year follow-up data from the Cordless registry were reported by Peimer, et al. (2015). Recurrence occurred in 47% of successfully treated joints.

On December 6, 2013, the FDA approved collagenase clostridium histolyticum (CCH, Xiaflex) as treatment for men with Peyronie's disease who have a penile curvature of at least thirty degrees. According to the FDA, CCH will be available only through a Risk Evaluation and Mitigation Strategy (REMS), a stipulation the FDA places on approved therapies when a risk of potentially serious adverse effects exists, in this case, penile fracture and other serious injuries to the penis. This mirrors the REMS requirement that accompanied the FDA approval for Dupuytren's contracture in 2010. The REMS for CCH requires healthcare professionals to complete a training program for administration of CCH to patients with Peyronie's disease. Per the manufacture's web site, the dose of CCH is 0.58 mg per injection administered into a Peyronie's plaque. Up to eight injections (four treatment cycles) may be administered in the course of treatment. Also, a penile modeling procedure is recommended after every treatment cycle of two injections in an effort to further disrupt the plaque.

In 2013, Gelbard and colleagues published the results of two (2) double-blind, placebo-controlled RCTs, IMPRESS (Investigation for Maximal Peyronie's Reduction Efficacy and Safety Studies) I and II, which examined the clinical efficacy and safety of collagenase injections in subjects with Peyronie disease. These RCTs were sponsored by the manufacturer (Auxilium Pharmaceuticals), the findings of which were submitted to the FDA in support of their biologics license application. These two (2) studies examined collagenase injections in 417 and 415 participants, respectively, through a maximum of four (4) treatment cycles, each separated by 6 weeks (for up to 8 injections of 0.58 mg collagenase). Men were stratified by baseline penile curvature (30 to 60 vs. 61 to 90 degrees) and randomized to collagenase injections or placebo in a 2:1 ratio. The primary outcomes were the percent change in the penile curvature abnormality and the change in the Peyronie's Disease Questionnaire (PDQ, developed by the manufacturer) symptoms bother score from baseline to 52 weeks. Data from the IMPRESS I and II studies were combined. Participants treated with collagenase injections showed a mean percent improvement in penile curvature abnormality of 34%, compared to 18% improvement in penile curvature in the placebo group; this change in curvature and the percent improvement in the collagenase group were significantly greater than in the placebo group (each p < 0.0001). The mean change in the PDQ symptom bother domain score was significantly improved in the collagenase group vs. the placebo group (-2.8 ± 3.8 vs. - 1.8 ± 3.5 , p = 0.0037). The most frequently reported complications (> 45%) in the collagenase-treated group included penile ecchymosis, penile swelling and penile pain. Six participants experienced treatment-related serious adverse events, including corporeal rupture in 3 cases and penile hematoma in the other three (3) cases. The three (3) corporeal ruptures and one hematoma were successfully repaired surgically. Of the two (2) remaining penile hematomas, one case was successfully resolved without intervention and the other resolved with aspiration.

Five studies, including two (2) manufacturer-sponsored double-blind, placebo-controlled randomized trials, have demonstrated short-term improvement in patients with Peyronie's disease. Larger trials directly comparing outcomes with current treatment options are required.

Use of this biologic material for treatment of conditions (e.g., adhesive capsulitis) other than Dupuytren's and Peyronie's disease is an off-label application.

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No studies including patients with adhesive capsulitis were identified in the literature search.

CODES

- Eligibility for reimbursement is based upon the benefits set forth in the member's subscriber contract.
- CODES MAY NOT BE COVERED UNDER ALL CIRCUMSTANCES. PLEASE READ THE POLICY AND GUIDELINES STATEMENTS CAREFULLY.
- Codes may not be all inclusive as the AMA and CMS code updates may occur more frequently than policy updates.

Code	Description	
20527	Injection, enzyme (e.g., collagenase), palmar fascial cord (e.g., Dupuytren's	
	contracture)	
26341	Manipulation, palmar fascial cord (e.g., Dupuytren's contracture), post enzyme	
	injection (e.g., collagenase), single cord	
While there are no specific CPT codes for the injection of collagenase for Peyronie's disease, the		
American Urological Association has recommended the following CPT codes for the use of Xiaflex for		
Peyronie's disease. These codes would be considered investigational when used for Xiaflex for		
Peyronie's disease:		
54235	Injection of corpora cavernosa with pharmacologic agent(s) (e.g., papaverine,	
	phentolamine)	
54200	Injection procedure for Peyronie's disease	
54205	Injection procedure for Peyronie disease; with surgical exposure of plaque	
96372	Therapeutic, prophylactic, or diagnostic injection (specify substance or drug);	
	subcutaneous or intramuscular	

CPT Codes

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HCPCS Codes

Code	Description
J0775	Injection, collagenase clostridium histolyticum, 0.01mg

ICD10 Codes

Code	Description
M72.0	Palmer fascial fibromatosis (Dupuytren)
M75.00-M75.02 (E/I)	Adhesive capsulitis of shoulder (code range)
N48.6 (E/I)	Induration penis plastica (Peyronie's disease)

REFERENCES

Alberton F. Efficacy and safety of collagenase clostridium histolyticum injection for Dupuytren contracture: report of 40 cases. <u>Musculoskelet Surg</u> 2014 Dec;98(3):225-32.

Anaissie J, et al. Impact of number of cycles of collagenase clostridium histolyticum on outcomes in patients with Peyronie's disease. <u>Urology</u> 2017 Feb;100:125-130.

Atoroshi I, et al. Collagenase treatment of Dupuytren's contracture using a modified injection method: a prospective cohort study of skin tears in 164 hands, including short-term outcome. <u>Acta Orthop</u> 2015 Jun;86(3):310-5.

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*Badalamente MA, et al. Enzyme injection as nonsurgical treatment of Dupuytren's disease. <u>J Hand Surg Am</u> 2000 Jul;25(4):629-636.

*Badalamente MA, et al. Collagen as a clinical target: nonoperative treatment of Dupuytren's disease. <u>J Hand Surg Am</u> 2002 Sep;27(5):788-98.

*Badalamente MA and Hurst LC. Efficacy and safety of injectable mixed collagenase subtypes in the treatment of Dupuytren's contracture. J Hand Surg Am 2007 Jul-Aug;32(6):767-74.

Badalamente MA, et al. Efficacy and safety of collagenase clostridium histolyticum in the treatment of proximal interphalangeal joints in Dupuytren contracture: combined analysis of 4 phase 3 clinical trials. J Hand Surg Am 2015 May;40(5):975-83.

Bear BJ, et al. Treatment of recurrent dupuytren contracture in joints previously effectively treated with collagenase clostridium histolyticum. J hand Surg Am 2017 May;42(5):391.31-391.

Beilian JA, et al. Intralesional injection of collagenase clostridium histolyticum may increase the risk of late-onset penile fracture. <u>Sex Med Rev</u> 2018 Apr;6(2):272-278.

BlueCross BlueShield Association. Injectable Clostridial Collagenase for fibroproliferative disorders. Medical Policy Reference Manual Policy #5.01.19. 2018 Oct 10.

Brazzelli M, et al. Collagenase clostridium histolyticum for the treatment of Dupuytren's contracture: systematic review and economic evaluation. <u>Health Technol Assess</u> 2015 Oct;19(90):1-202.

Capece M, et al. Collagenase clostridium histolyticum for the treatment of Peyronie's disease: a prospective Italian multicentric study. <u>Andrology</u> 2018 Jul;6(4):564-567.

Carson CC 3rd, et al. Analysis of the clinical safety of intralesional injection of collagenase Clostridium histolyticum (CCH) for adults with Peyronie's disease (PD). <u>BJU Int</u> 2015 Nov;116(5):815-22.

*Chen NC, et al. A systematic review of outcomes of fasciotomy, aponeurotomy, and collagenase treatments for Dupuytren's contracture. <u>Hand</u> 2011 Sep;6(3):250-5.

Costas B, et al. Efficacy and safety of collagenase clostridium histolyticum for Dupuytren disease nodules: a randomized controlled trial. <u>BMC Musculoskelet Disord</u> 2017 Aug 30;18(1):374.

*Crean SM, et al. The efficacy and safety of fasciectomy and fasciotomy for Dupuytren's contracture in European patients: a structured review of published studies. <u>J Hand Surg Eur Vol</u> 2011 Jun;36(5):396-407.

Equi-Rojo MA, et al. Experience in the use of collagenase clostridium histolyticum in the management of Peyronie's disease: current data and future prospects. <u>Ther Adv Urol</u> 2014 Oct;6(5):192-7.

Food and Drug Administration. XIAFLEX® (collagenase clostridium histolyticum). [http://www.fda.gov/downloads/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/UCM2087 37.pdf] accessed 2/5/19.

Gaston RG, et al. The efficacy and safety of concurrent collagenase clostridium histolyticum injections for 2 Dupuytren contractures in the same hand: A prospective, multicenter study. <u>J Hand Surg Am</u> 2015 Oct;40(10):1963-71.

Goldstein I, et al. Changes in the effects of Peyronie's disease after treatment with collagenase clostridium histolyticum: male patients and their female partners. <u>Sex Med</u> 2017 June;5(2):e124-130.

Hellstrom WJG, et al. Safety profile of collagenase clostridium histolyticum stratified by degree of penile curvature in patients with Peyronie disease. <u>Urology</u> 2017 Aug;106:237.e14.

Hwee YK, et al. Outcome of Dupuytren contractures after collagenase clostridium histolyticum injection: a single institution experience. <u>Ann Plast Surg</u> 2017 Aug;79(2):145-148.

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*Jordan GH. The use of intralesional clostridial collagenase injection therapy for Peyronie's disease: a prospective, single-center, non-placebo-controlled study. <u>J Sex Med</u> 2008 Jan;5(1):180-187.

Levine LA, et al. Clinical safety and effectiveness of collagenase clostridium histolyticum injection in patients with Peyronie's disease: a phase 3 open-label study. <u>J Sex Med</u> 2015 Jan;12(1):248-58.

Lipshultz LI, et al. Clinical efficacy of collagenase clostridium histolyticum in the treatment of Peyronie's disease by subgroup: results from two large, double-blind, randomized, placebo-controlled, phase III studies. <u>BJU Int</u> 2015 Oct;116(4):650-6.

McGrouther DA, et al. The efficacy and safety of collagenase clostridium histolyticum in the treatment of patients with moderate Dupuytren's contracture. <u>Curr Med Res Opin</u> 2014 Apr;30(4):733-9.

National Institute for Health and Clinical Excellence (NICE). Collagenase clostridium histolyticum for treating Dupuytren's contracture. Technology appraisal guidance [TA459]. 2017 July 26. [https://www.nice.org.uk/guidance/ta459]. accessed 2/5/19.

Nguyen HMT, et al. Safety and efficacy of collagenase clostridium histolyticum in the treatment of acute-phase peyronie's disease. J Sex med 2017 Oct;14(10):1220-1225.

Peimer CA, et al. Safety and tolerability of collagenase clostridium histolyticum and fasciectomy for Dupuytren's contracture. J Hand Surg Eur Vol 2015 Feb;40(2):141-9.

Peimer CA, et al. Dupuytren contracture recurrence following treatment with collagenase clostridium histolyticum (CORDLESS [Collagenase Option for Reduction of Dupuytren Long-term Evaluation of Safety Study]): 5-year data. J Hand Surg Am 2015 Aug;40(8):1597-605.

Povlsen B, et al. What is the better treatment for single digit Dupuytren's contracture: surgical release or collagenase clostridium (Xiaflex) injection? <u>Hand Surg</u> 2014 Aug 25:1-4 [Epub ahead of print].

Ralph DJ, et al. Treatment of Peyronie's disease with collagenase clostridium histolyticum and vacuum therapy: a randomized, open-label pilot study. <u>J Sex Med</u> 2017 Nov;14(11):1430-1437.

*Russell S, et al. Systematic evidence-based analysis of plaque injection therapy for Peyronie's disease. <u>Eur Urol</u> 2007 March;51(3):640-647.

Russo GI, et al. Clinical efficacy of injection and mechanical therapy for Peyronie's disease: a systematic review of the literature. <u>Eur Urol</u> 2018 Dec;74(6):767-781.

Scherman P, et al. One-year results of needle fasciotomy and collagenase injection in treatment of Dupuytren's contracture: a two-centre prospective randomized clinical trial. J Hand Surg 2016 July;41(6):577-582.

Skov ST, et al. Injectable collagenase versus percutaneous needle fasciotomy for Dupuytren contracture in proximal interphalangeal joints: a randomized controlled trial. J Hand Surg Am 2017 May;42(5):321-328.

Smeraglia F, et al. Collagenase clostridium histolyticum in Dupuytren's contracture: a systematic review. <u>Br Med Bull</u> 2016 June;118(1):149-158.

Sood A, et al. Treatment of Dupuytren disease with injectable collagenase in a veteran population: a case series at the Department of Veterans Affairs New Jersey Health Care System. <u>Eplasty</u> 2014 Mar 27;14:413.

Stromberg J, et al. Comparison of treatment outcome after collagenase and needle fasciotomy for Dupuytren contracture: a randomized, single-blinded, clinical trial with a 1-year follow-up. J Hand Surg Am 2016 Sept;41(9):873-880.

Traore EJ, et al. Collagenase clostridium histolyticum in the management of Peyronie's disease: a review of the evidence. <u>Ther Adv Urol</u> 2016 June;8(3):192-202.

Verheyden JR. Early outcomes of a sequential series of 144 patients with Dupuytren's contracture treated by collagenase injection using and increased dose, multi-cord technique. J Hand Surg Eur Vol 2015 Feb;40(2):133-40.

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Warwick D, et al. Collagenase Clostridium histolyticum in patients with Dupuytren's contracture: results from POINT X, an open- label study of clinical and patient-reported outcomes. J Hand Surg Eur Vol 2015 Feb;40(2):124-32.

Warwick DJ, et al. New insights into the immediate outcome of collagenase injections for Dupuytren's contracture. J Hand Surg 2016 July;41(6):583-588.

Warwick, D, et al. Collagenase clostridium histolyticum: emerging practice patterns and treatment advances. J Plast Surg Hand Surg 2016 Oct;50(5):251-261.

*Witthaut J, et al. Determining clinically important changes in range of motion in patients with Dupuytren's contracture: secondary analysis of the randomized, double-blind, placebo-controlled CORD I study. <u>Clin Drug Investig</u> 2011 Nov 1;31(11):791-8.

Wymer K, et al. Plaque calcification: an important predictor of collagenase clostridium histolyticum treatment outcomes for men with Peyronie's disease. <u>Urology</u> 2018 Sep;119:109-114.

Yafi FA, et al. Results of SMSNA survey regarding complications following intralesional injection therapy with collagenase clostridium histolyticum for Peyronie's disease. J Sex Med 2016 April;13(4):684-689.

Yang KK, et al. Peyronie's disease and injectable collagenase clostridium histolyticum: safety, efficacy, and improvements in subjective symptoms. <u>Urology</u> 2016 Aug;94:143-147.

Ziegelmann MJ, et al. Restoration of penile function and patient satisfaction with intralesional collagenase clostridium histolyticum injection for Peyronie's disease. <u>J Urol</u> 2016 April;195(4P1):1051-1056.

Zhou C, et al. Collagenase clostridium histolyticum versus limited fasciectomy for Dupuytren's contracture: Outcomes from a multicenter propensity score matched study. <u>Plast Reconstr Surg</u> 2015 Jul;136(1):87-97.

Zhou C, et al. Comparative effectiveness of needle aponeurotomy and collagenase injection for Dupuytren's contracture: a multicenter study. <u>Plast Reconstr Surg Glob Open</u> 2017 Sept 25;5(9):e1425.

*Key Article

KEY WORDS

Collagenase clostridium injection, collagenase injection, Dupuytren's contracture, Peyronie's disease, Xiaflex

CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS

There is currently a Local Coverage Determination (LCD) for Drugs and Biologicals. Please refer to the following LCD website for Medicare Members: <u>https://www.cms.gov/medicare-coverage-database/details/lcd-details.aspx?LCDId=33394&ver=35&SearchType=Advanced&CoverageSelection=Both&NCSelection=NCA%7cCAL%7cNCD%7cMEDCAC%7cTA%7cMCD&ArticleType=SAD%7cEd&PolicyType=Both&s=41&KeyWord=drugs&KeyWordLookUp=Title&KeyWordSearchType=Exact&kq=true&bc=IAAAACAAAAA&</u>