MEDICAL COVERAGE POLICY	
SERVICE:	**Nerve Graft with Radical Prostatectomy**
Policy Number:	**060**
Effective Date:	**12/01/2019**
Last Review:	**09/26/2019**
Next Review Date:	**09/26//2020**

Important note:
Unless otherwise indicated, this policy will apply to all lines of business.
Even though this policy may indicate that a particular service or supply may be considered medically necessary and thus covered, this conclusion is not based upon the terms of your particular benefit plan. Each benefit plan contains its own specific provisions for coverage and exclusions. Not all benefits that are determined to be medically necessary will be covered benefits under the terms of your benefit plan. You need to consult the Evidence of Coverage (EOC) or Summary Plan Description (SPD) to determine if there are any exclusions or other benefit limitations applicable to this service or supply. If there is a discrepancy between this policy and your plan of benefits, the provisions of your benefits plan will govern. However, applicable state mandates will take precedence with respect to fully insured plans and self-funded non-ERISA (e.g., government, school boards, church) plans. Unless otherwise specifically excluded, Federal mandates will apply to all plans. With respect to Medicare-linked plan members, this policy will apply unless there are Medicare policies that provide differing coverage rules, in which case Medicare coverage rules supersede guidelines in this policy. Medicare-linked plan policies will only apply to benefits paid for under Medicare rules, and not to any other health benefit plan benefits. CMS's Coverage Issues Manual can be found on the CMS website. Similarly, for Medicaid-linked plans, the Texas Medicaid Provider Procedures Manual (TMPPM) supersedes coverage guidelines in this policy where applicable.

SERVICE: Nerve Graft in Association with Radical Prostatectomy

PRIOR AUTHORIZATION: Not applicable.

POLICY: SWHP considers unilateral or bilateral nerve graft in patients who have undergone resection of one or both neurovascular bundles as part of radical prostatectomy experimental and investigational because there is a paucity of peer-reviewed literature demonstrating efficacy with regard to erectile dysfunction.

SWHP also considers the Avance® Nerve Graft, Axogen 2 Nerve Wrap, Integra NeuralWrap™, the NeuraWrap™, and various collagen nerve cuff/wraps, unproven for all indications.

OVERVIEW: Erectile dysfunction is a common problem after radical prostatectomy. In particular, spontaneous erections are usually absent in patients whose extent of prostate cancer requires bilateral resection of the neurovascular bundles as part of the radical prostatectomy procedure. A variety of noninvasive treatments are available, including vacuum constriction devices and intra-cavernosal injection therapy. However, spontaneous erectile activity is preferred by patients.

There has been interest in sural nerve grafting to replace cavernous nerves resected at the time of prostatectomy. The sural nerve is considered expendable and has been used extensively in other nerve grafting procedures, such as brachial plexus and peripheral nerve injuries. As applied to prostatectomy, a portion of the sural nerve is harvested from one leg and then anastomosed to the divided ends of the cavernous nerve. Reports are also being published using other nerves, such as the genitofemoral nerve.
Limited data are available regarding the long term outcomes of sural nerve grafting. These data are insufficient to permit scientific conclusions regarding the long-term effectiveness of sural nerve grafting in men undergoing prostatectomy.

MANDATES: None

CODES:
Important note:

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CODES: Due to the wide range of applicable diagnosis codes and potential changes to codes, an inclusive list may not be presented, but the following codes may apply. Inclusion of a code in this section does not guarantee that it will be reimbursed, and patient must meet the criteria set forth in the policy language.

CPT Codes:	
CPT Not Covered:	64911, 64912, 64913, 64999
ICD-10 codes:	
ICD-10 Not covered:	N52.01 - N52.9 Male erectile dysfunction following radical retro-pubic prostatectomy

CMS: No NCDs or LCDs.

POLICY HISTORY:

Status	Date	Action
New	12/6/2010	New policy
Reviewed	12/6/2011	Reviewed.
Reviewed	11/15/2012	Reviewed.
Reviewed	11/14/2013	No changes.
Reviewed	11/6/2014	No changes.
Reviewed	10/22/2015	No changes.
Reviewed	10/27/2016	No changes.
Reviewed	09/26/2017	No changes.
Reviewed	07/10/2018	Updated policy language
Reviewed	09/26/2019	No changes.

REFERENCES:

The following scientific references were utilized in the formulation of this medical policy. SWHP will continue to review clinical evidence related to this policy and may modify it at a later date based upon the evolution of the published clinical evidence. Should additional scientific studies become available and they are not included in the list, please forward the reference(s) to SWHP so the information can be reviewed by the Medical Coverage Policy Committee (MCPC) and the Quality Improvement Committee (QIC) to determine if a modification of the policy is in order.

1. Canto, E.L., Nath, R.K., et al. Cavermap-assisted sural nerve interposition graft during radical prostatectomy. Urologic Clinics of North America (2001) 28(4):839-48.
2. Kim, E.D., Nath, R., et al. Bilateral nerve grafting during retropubic prostatectomy: extended follow up. Urology (2001 December) 58(6):983-7.
3. Singh, H., Karakiewicz, P., et al. Impact of unilateral interposition sural nerve grafting on recovery of urinary function after radical prostatectomy. Urology (2004 June) 63(6):1122-7.
4. Nelson, B.A., Chang, S.S., et al. Morbidity and efficacy of genitofemoral nerve grafts with radical retropubic prostatectomy. Urology (2006 April) 67(4):789-92.
5. Sim, H.G., Kliot, M., et al. Two-year outcome of unilateral sural nerve interposition graft after radical prostatectomy. Urology (2006 December) 68(6):1290-4.
6. Nerve Graft in Association with Radical Prostatectomy. Chicago, Illinois: Blue Cross Blue Shield Association Medical Policy Reference Manual (2007 February) Surgery 7.01.81.
7. Secin, F.P., Koppie, T.M., et al. Bilateral cavernous nerve interposition grafting during radical retropubic prostatectomy: Memorial Sloan-Kettering Cancer Center experience. The Journal of Urology (2007 February) 177(2):664-8.

8. Namiki, S., Saito, S., et al. Impact of unilateral sural nerve graft on recovery of potency and continence following radical prostatectomy: three year longitudinal study. The Journal of Urology (2007 May 11) 178(1):212-6.
9. Hanson, G.R., Borden, L.S., et al. Erectile function following unilateral cavernosal nerve replacement. Canadian Journal of Urology (2008 April) 15(2):3990-3.
10. Nerve Graft in Association with Radical Prostatectomy. Chicago, Illinois: Blue Cross Blue Shield Association Medical Policy Reference Manual (2008 May) Surgery 7.01.81.
11. Satkunasivam, R., Appu, S., et al. Recovery of erectile function after unilateral and bilateral cavernous nerve interposition grafting during radical pelvic surgery. Journal of Urology (2009 March) 181(3):1258-63.
12. Patel VR, Samavedi S, Bates AS, et al. Dehydrated human amnion/chorion membrane allograft nerve wrap around the prostatic neurovascular bundle accelerates early return to continence and potency following robot-assisted radical prostatectomy: Propensity score-matched analysis. Eur Urol. 2015;67(6):977-980.