SHP Brachytherapy

AUTH: SHP Medical 71 v6 (AC)

MCG Health
Ambulatory Care
26th Edition

Link to Codes

Coverage

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See the appropriate benefit document for specific coverage determination. Member specific benefits take precedence over medical policy.

Application to Products

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- Policy is applicable to all products except Optima Medicare.
- Optima Medicare covers brachytherapy for any indication.
- For cardiovascular brachytherapy see MCG Brachytherapy (Cardiovascular) A-0419
- For accelerated partial breast irradiation (e.g. mammosite) see SHP Accelerated Partial Breast Irradiation Medical Policy 207.

Authorization Requirements

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- Pre-certification by the Plan is required.
- Radioactive seed localization (RSL) in lieu of wire localization is covered for use to localize non palpable breast lesions and does not require pre-certification.

Description of Item or Service

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Brachytherapy utilizes radioactive seeds which are surgically placed next to a tumor. These allow a physician to use higher total dose of radiation to treat a small area.

Exceptions and Limitations

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- There is insufficient scientific evidence to support the medical necessity of the following brachytherapy procedures as they are not shown to improve health outcomes upon technology review:
  - High dose electronic brachytherapy (e.g. Xoft Axxent)
  - Non-invasive brachytherapy (e.g. AccuBoost)
- For all plans other than Optima Medicare, there is insufficient scientific evidence to support the medical necessity of brachytherapy for uses other than those listed in the clinical indications for procedure section.

Clinical Indications for Procedure

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- Brachytherapy for Optima Commercial or Optima Virginia Medicaid Plans may be indicated for **1 or more** of the following :
  - Breast cancer as indicated by **1 or more** of the following:
    - Localized disease characterized as low-risk, after treatment with lumpectomy, as indicated by **1 or more** of the following:
      - Invasive ductal carcinoma with **ALL** of the following:
        - BRCA negative
        - Estrogen receptor positive
        - Negative surgical margin width of 2 mm or greater
        - No lymphovascular invasion
        - Individual age 50 years or older
        - Tumor size 2 cm or less (stage T1)
      - Low or intermediate grade ductal carcinoma in situ with **ALL** of the following:
        - Negative surgical margin width of 3 mm or greater
        - Tumor size 2.5 cm or less
    - Localized disease characterized as high-risk, after treatment with lumpectomy, as indicated by **ALL** of the following:
      - Administered in conjunction with whole breast radiation
      - Individual at higher risk of recurrence as indicated by **1 or more** of the following :
        - Age younger than 50 years
        - Focally positive surgical margins
        - High-grade (poorly differentiated) disease
      - Stage I, IIA, or IIB disease, or T3, N1, M0 disease
  - Cervical cancer

- Cholangiocarcinoma, as indicated by **ALL** of the following:
  - As adjuvant treatment after surgery for individuals with **1 or more** of the following:
    - R1 resection (positive margin)
    - R2 resection (gross residual disease after resection)
    - Carcinoma in situ found at the surgical specimen margin
- Esophageal cancer, as indicated by **1 or more** of the following:
  - To treat a gross residual tumor or unresectable luminal lesion
  - Palliative treatment needed for dysphagia
- Head and neck cancer
- Lung cancer, as indicated by **1 or more** of the following:
  - Non-small cell lung cancer, and symptomatic recurrent disease as indicated by **1 or more** of the following:
    - Endobronchial obstruction
    - Symptomatic hemoptysis
  - After local treatment failure with external beam radiation therapy, and recurrent symptoms as indicated by **1 or more** of the following:
    - Atelectasis
    - Cough
    - Dyspnea
    - Hemoptysis
    - Post-obstructive pneumonia
- Ocular melanoma without evidence of distant metastasis (ie, confined to the globe)
- Penile cancer
- Prostate cancer, as indicated by **1 or more** of the following:
  - Localized disease characterized as low-risk, as indicated by **ALL** of the following:
    - International Society of Urological Pathology (ISUP) Grade Group 1 (Gleason score of 6 or less)
    - Life expectancy 10 years or greater
    - Pretreatment PSA less than 10 ng/mL (mcg/L)
    - Stage T1 or T2a prostate cancer
    - No active inflammatory bowel disease
  - Localized disease characterized as intermediate-risk or high-risk, as indicated by **ALL** of the following:
    - Administered in conjunction with external beam radiation
    - ISUP Grade Group 2 to 5 (Gleason score of 7 to 10)
    - Life expectancy greater than 5 years
    - Pretreatment PSA of 10 ng/mL (mcg/L) or greater
    - Stage T2b/T2c or T3a prostate cancer
  - Local recurrence after primary radiation therapy and **ALL** of the following:
    - Pretreatment PSA of 10 ng/mL (mcg/L) or less
    - No prior pelvic lymph node dissection
- Rectal cancer, as indicated by **1 or more** of the following:
  - Stage II or III disease that is medically operable, and **ALL** of the following:
    - Concurrent chemoradiation planned
    - Individual refuses abdominoperineal resection
    - Tumor is less than 5 cm from the anal verge
  - Stage II or III disease that is medically inoperable, and **1 or more** of the following:
    - Administered with chemoradiation, as indicated by **1 or more** of the following:
      - Tumor 10 cm or less from anal verge, and Eastern Cooperative Oncology Group (ECOG) performance status 0 to 1
      - Tumor 10 cm or less from anal verge, Eastern Cooperative Oncology Group (ECOG) performance status 2 or higher, and local symptoms present
      - Tumor less than 5 cm, Eastern Cooperative Oncology Group (ECOG) performance status 2 or higher, and local symptoms absent
    - Tumor 5 cm or less from anal verge, Eastern Cooperative Oncology Group (ECOG) performance status 0 to 1 and local symptoms absent
    - Tumor 10 cm or less from anal verge and local symptoms present
- Retinoblastoma, as indicated by **ALL** of the following:
  - After local treatment failure with **1 or more** of the following:
    - Chemotherapy
    - Cryotherapy
    - External beam radiation therapy
    - Laser therapy
  - Clinical staging demonstrates no evidence of metastases
- Soft tissue sarcoma
- Skin Cancer (Basal Cell and Squamous Cell), as indicated by **1 or more** of the following:
  - To treat a skin cancer which is not amenable to surgery or external beam radiation
  - To treat a previously irradiation field
- Squamous cell cancer of the eye as indicated by **ALL** of the following:
  - Only other option available is removal of the eye
- Uterine Neoplasms (Endometrial Cancer, Uterine sarcoma, Uterine Cancer)
- Vulvar/Vaginal cancer

- Brachytherapy is **NOT COVERED** for **ANY** of the following:
  - High dose electronic brachytherapy (e.g. Xoft Axxent)
  - Non-invasive brachytherapy (e.g. AccuBoost)

Document History

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- Revised Dates:
  - 2021: March
  - 2020: April
  - 2019: December
  - 2015: June, July, October
  - 2014: June, December
  - 2013: April, May, June
  - 2012: January, June, July, September
  - 2011: June, December
  - 2010: March, July

- 2009: June
- 2008: January, June

- Reviewed Dates:
  - 2023: March
  - 2022: March
  - 2019: March
  - 2018: November
  - 2017: November
  - 2016: March, July, August
  - 2010: February, June
  - 2005: October
- Effective Date: February 2001

Coding Information

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- CPT/HCPCS codes covered if policy criteria is met:
  - CPT 19298 - Placement of radiotherapy afterloading brachytherapy catheters (multiple tube andbutton type) into the breast for interstitial radioelement application following (at the time of or subsequent to) partial mastectomy, includes imaging guidance
  - CPT 20555 - Placement of needles or catheters into muscle and/or soft tissue for subsequent interstitial radioelement application (at the time of or subsequent to the procedure)
  - CPT 41019 - Placement of needles, catheters, or other device(s) into the head and/or neckregion (percutaneous, transoral, or transnasal) for subsequent interstitial radioelementapplication
  - CPT 55875 - Transperineal placement of needles or catheters into prostate for interstitialradioelement application, with or without cystoscopy
  - CPT 55920 - Placement of needles or catheters into pelvic organs and/or genitalia (exceptprostate) for subsequent interstitial radioelement application
  - CPT 57156 - Insertion of a vaginal radiation afterloading apparatus for clinical brachytherapy
  - CPT 77316 - Brachytherapy isodose plan; simple (calculation[s] made from 1 to 4 sources, orremote afterloading brachytherapy, 1 channel), includes basic dosimetry calculation(s)
  - CPT 77317 - Brachytherapy isodose plan; intermediate (calculation[s] made from 5 to 10sources, or remote afterloading brachytherapy, 2-12 channels), includes basic dosimetrycalculation(s)
  - CPT 77318 - Brachytherapy isodose plan; complex (calculation[s] made from over 10 sources, orremote afterloading brachytherapy, over 12 channels), includes basic dosimetry calculation(s)
  - CPT 77750 - Infusion or instillation of radioelement solution (includes 3-month follow-up care)
  - CPT 77761 - Intracavitary radiation source application; simple
  - CPT 77762 - Intracavitary radiation source application; intermediate
  - CPT 77763 - Intracavitary radiation source application; complex
  - CPT 77767 - Remote afterloading high dose rate radionuclide skin surface brachytherapy,includes basic dosimetry, when performed; lesion diameter up to 2.0 cm or 1 channel
  - CPT 77768 - Remote afterloading high dose rate radionuclide skin surface brachytherapy,includes basic dosimetry, when performed; lesion diameter over 2.0 cm and 2 or more channels,or multiple lesions
  - CPT 77770 - Remote afterloading high dose rate radionuclide interstitial or intracavitarybrachytherapy, includes basic dosimetry, when performed; 1 channel
  - CPT 77771 - Remote afterloading high dose rate radionuclide interstitial or intracavitarybrachytherapy, includes basic dosimetry, when performed; 2-12 channels
  - CPT 77772 - Remote afterloading high dose rate radionuclide interstitial or intracavitarybrachytherapy, includes basic dosimetry, when performed; over 12 channels
  - CPT 77778 - Interstitial radiation source application, complex, includes supervision, handling,loading of radiation source, when performed
  - CPT 77790 - Supervision, handling, loading of radiation source
  - CPT 77799 - Unlisted procedure, clinical brachytherapy (need to put for cardiovascular brachytherapy see mcg)
- CPT/HCPCS codes considered not medically necessary per this Policy:
  - CPT 0394T - High dose rate electronic brachytherapy, skin surface application, per fraction, includes basic dosimetry, when performed
  - CPT 0395T - High dose rate electronic brachytherapy, interstitial or intracavitary treatment, per fraction, includes basic dosimetry, when performed

References

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References used include but are not limited to the following:

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Codes

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CPT® : 0394T, 0395T, 19298, 20555, 41019, 55875, 55920, 57156, 77316, 77317, 77318, 77750, 77761, 77762, 77763, 77767, 77768, 77770, 77771, 77772, 77778, 77790, 77799

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