

Medical Coverage Policy | Local or Whole Body Hyperthermia



EFFECTIVE DATE: 08|01|2008

POLICY LAST UPDATED: 02|16|2023

OVERVIEW

Local hyperthermia for treatment of cancer consists of the use of heat to make tumors more susceptible to cancer therapy measures. Whole-body hyperthermia requires the patient to be placed under either general anesthesia or deep sedation.

MEDICAL CRITERIA

Not applicable

PRIOR AUTHORIZATION

Not applicable

POLICY STATEMENT

Medicare Advantage Plans and Commercial Products

Local hyperthermia therapy may be considered medically necessary when used in combination with radiation therapy for the treatment of patients with primary or metastatic cutaneous or subcutaneous superficial tumors.

Local hyperthermia is not covered for Medicare Advantage Plans and not medically necessary for Commercial products when used alone or in combination with chemotherapy as the evidence is insufficient to determine the effects of the technology on health outcomes.

Whole-body hyperthermia therapy is not covered for Medicare Advantage Plans and not medically necessary for Commercial products as the evidence is insufficient to determine the effects of the technology on health outcomes.

COVERAGE

Benefits may vary between groups/contracts. Please refer to the appropriate Benefit Booklet, Evidence of Coverage or Subscriber Agreement for the applicable radiation therapy benefits/coverage.

BACKGROUND

Hyperthermia is a type of cancer treatment in which body tissue is exposed to high temperatures (up to 113°F) to damage and kill cancer cells. Hyperthermia can be administered using local and whole-body techniques.

Local hyperthermia entails elevating the temperature of superficial or subcutaneous tumors while sparing surrounding normal tissue, using either external or interstitial modalities. Local hyperthermia therapy may be considered medically necessary when used in combination with radiation therapy for the treatment of patients with primary or metastatic cutaneous or subcutaneous superficial tumors. Local hyperthermia is considered not medically necessary when used alone or in combination with chemotherapy.

Whole-body hyperthermia requires the patient to be placed under either general anesthesia or deep sedation. The patient's body temperature is increased to 108°F by packing the patient in heated (hot water) blankets. The elevated body temperature is maintained for a period of 4 hours, while the essential body functions are closely monitored. Approximately 1 hour is required for a "cooling off" period, after which the patient is

constantly observed for a minimum of 12 hours. This modality has been variously termed “systemic thermotherapy” or “whole-body hyperthermia.” Whole-body hyperthermia therapy is considered not medically necessary. There are inadequate data to permit scientific conclusions regarding the use of whole-body hyperthermia as an adjunct to either radiation or chemotherapy, and inadequate data regarding the use of local hyperthermia in conjunction with chemotherapy alone.

CODING

Medicare Advantage Plans and Commercial Products

The following codes are covered for local hyperthermia:

- 77600** Hyperthermia, externally generated; superficial (ie, heating to a depth of 4 cm or less)
- 77610** Hyperthermia generated by interstitial probe(s); 5 or fewer interstitial applicators
- 77615** Hyperthermia generated by interstitial probe(s); more than 5 interstitial applicators

The following codes are not covered for Medicare Advantage Plans and not medically necessary for Commercial products:

- 77605** Hyperthermia, externally generated; deep (ie, heating to depths greater than 4 cm)
- 77620** Hyperthermia generated by intracavitary probe(s)

There is no specific CPT procedure code for whole-body hyperthermia. To report use an unlisted code.

RELATED POLICIES

Not applicable

PUBLISHED

- Provider Update, April 2023
- Provider Update, June 2022
- Provider Update, May, 2021
- Provider Update, June 2020
- Provider Update, September 2019

REFERENCES

1. Centers for Medicare and Medicaid Services. Medicare Coverage Database: *NCD for Hyperthermia for Treatment of Cancer (110.1)*.
<https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=66&ncdver=1&bc=AgAAgAAAAAAAAAAAA%3d%3d&>
2. American Cancer Society: Making Treatment Decisions; Hyperthermia.
3. Overgaard J, Gonzalez Gonzalez D, Hulshof MC et al. Randomised trial of hyperthermia as adjuvant to radiotherapy for recurrent or metastatic malignant melanoma. *European Society for Hyperthermic Oncology. Lancet* 1995;345(8949):540-3.
4. Perez CA, Pajak T, Emami B et al. Randomized phase III study comparing irradiation and hyperthermia with irradiation alone in superficial measurable tumors. Final report by the Radiation Therapy Oncology Group. *Am J Clin Oncol* 1991;14(2):133-41.
5. Vernon CC, Hand JW, Field SB et al. Radiotherapy with or without hyperthermia in the treatment of superficial localized breast cancer: results from five randomized controlled trials. *International Collaborative Hyperthermia Group. Int J Radiat Oncol Biol Phys* 1996;35(4):731-44.
6. Emami B, Scott C, Perez CA et al. Phase III study of interstitial thermoradiotherapy compared with interstitial radiotherapy alone in the treatment of recurrent or persistent human tumors. A prospectively controlled randomized study by the Radiation Therapy Group. *Int J Radiat Oncol Biol Phys* 1996;34(5):1097-04.
7. Emami B, Stauffer P, Dewhirst M et al. RTOG quality assurance guidelines for interstitial hyperthermia. *Int J Radiat Oncol Biol Phys* 1991;20(5):1117-24.
8. Sherar M, Liu FF, Pintilie M et al. Relationship between thermal dose and outcome in thermoradiotherapy treatments for superficial recurrences of breast cancer: data from a phase III trial. *Int*

J Radiat Oncol Biol Phys 1997;39(2):371-80.

9. Robins HI, Rushing D, Kutz M et al. Phase I clinical trial of melphalan and 41.8 degrees C whole-body hyperthermia in cancer patients. J Clin Oncol 1997;15(1):158-64.

10. Mittal BB, Zimmer MA, Sathiaselan V et al. Phase I/II trial of combined 131I anti-CEA monoclonal antibody and hyperthermia in patients with advanced colorectal adenocarcinoma. Cancer 1996;78(9):1861-70.

11. Wiedemann GJ, Robins HI, Gutsche S et al. Ifosfamide, carboplatin and etoposide (ICE) combined with 41.8 degrees C whole body hyperthermia in patients with refractory sarcoma. Eur J Cancer 1996;32A(5):888-92.

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