

Ablation of Primary and Metastatic Liver Tumors

State(s):

☒ Idaho ☒ Montana ☒ Oregon ☒ Washington ☐ Other:

LOB(s):

☒ Commercial ☒ Medicare ☒ Medicaid

Enterprise Policy

Clinical Guidelines are written when necessary to provide guidance to providers and members in order to outline and clarify coverage criteria in accordance with the terms of the Member's policy. This Clinical Guideline only applies to PacificSource Health Plans, PacificSource Community Health Plans, and PacificSource Community Solutions in Idaho, Montana, Oregon, and Washington. Because of the changing nature of medicine, this list is subject to revision and update without notice. This document is designed for informational purposes only and is not an authorization or contract. Coverage determination are made on a case-by-case basis and subject to the terms, conditions, limitations, and exclusions of the Member's policy. Member policies differ in benefits and to the extent a conflict exists between the Clinical Guideline and the Member's policy, the Member's policy language shall control. Clinical Guidelines do not constitute medical advice nor guarantee coverage.

Background

Hepatic tumors can arise either as primary liver cancer (e.g., hepatocellular carcinoma, HCC) or by metastasis to the liver from other primary cancer sites. Local therapy for hepatic metastasis may be indicated when there is no extrahepatic disease, which rarely occurs for patients with primary cancers other than colorectal carcinoma or certain neuroendocrine malignancies. At present, surgical resection with adequate margins or liver transplantation are the only curative treatments available. However, the majority of hepatic tumors are unresectable at diagnosis, due either to their anatomic location, size, number of lesions, or underlying liver reserve.

Locoregional therapies are proposed as a treatment for unresectable hepatic tumors, both as primary treatment, palliative treatment, and as a bridge to liver transplant. In the case of liver transplants, the intent is to reduce tumor progression while awaiting transplantation and to preserve a member's candidacy for liver transplant during the wait time for a donor organ.

Treatment Options for Locoregional Therapy:

Percutaneous Ethanol Injection

Using a needle, percutaneous ethanol injection (PEI) delivers an injection of 95 percent ethanol directly into a tumor. Multiple treatment sessions may be performed in order to achieve tumor destruction. Like other local ablative techniques, PEI is most successful in small HCC tumors when resection is not an option.

Cryosurgical Ablation

Cryosurgical ablation destroys cells by freezing target tissues, most often by inserting a probe into the tumor through which coolant is circulated. Cryosurgery may be performed as an open surgical technique or as a closed procedure under laparoscopic or ultrasound guidance.

Radiofrequency Ablation

Radiofrequency ablation (RFA) destroys cells (cancerous and normal) by applying a heat-generating rapidly alternating radiofrequency current through probes inserted into the tumor. The cells ablated by RFA are not removed but are gradually replaced by fibrosis and scar tissue. If there is local recurrence, it occurs at the edge of this scar tissue and, in some cases, may be retreated. RFA can be performed as an open surgical procedure, laparoscopically, or percutaneously with ultrasound or computed tomography (CT) guidance.

Microwave Ablation

Microwave ablation (MWA) is a technique in which the use of microwave energy induces a high speed alternating electric field which causes water molecule rotation and the creation of heat. MWA uses ultrasound, computed tomography (CT), or magnetic resonance imaging (MRI) to guide placement of a needle-like probe into a tumor. This results in thermal coagulation and localized tissue necrosis. In MWA, a single microwave antenna or multiple antennas connected to a generator are inserted directly into the tumor or tissue to be ablated; energy from the antennas generates friction and heat. The local heat coagulates the tissue adjacent to the probe, resulting in tissue ablation. In tumors greater than 2 cm in diameter, 2 to 3 antennas may be used simultaneously to increase the targeted area of MWA and shorten operative time. Multiple antennas may also be used simultaneously to ablate multiple tumors. MWA can be performed surgically, percutaneously or laparoscopically and is most often performed by a specially trained interventional radiologist in a radiology suite or in the operating room.

Criteria

Commercial

Prior authorization is required.

I. PacificSource may consider percutaneous ethanol injection, cryoablation, radiofrequency and microwave local ablative techniques to be medically necessary for treatment of liver tumors when either of the following (**A or B**) are met:

A. In members *not* currently awaiting liver transplantation, and **one or more** of the following criteria are met:

1. Unresectable primary liver tumors when **ALL** of the following criteria are met:

- a.** The tumor(s) is 5 cm or less in diameter;
- b.** There are no more than 3 hepatic lesions throughout the liver; and
- c.** There is documentation that the tumor(s) is unresectable (e.g., due to comorbidities or an estimate of inadequate liver volume following resection).

2. Hepatic metastases from colorectal tumors when **ALL** of the following criteria are met:

- a.** The metastatic tumor(s) is 5 cm or less in diameter;

- OR**

Medicaid

Medicare

Experimental/Investigational/Unproven

- More than 3 hepatocellular carcinoma tumors; more than 5 metastatic colorectal tumors in the liver; or metastatic or primary liver tumors larger than 5 cm in diameter;
- Metastases to the liver from organ tumors other than colorectal, asymptomatic neuroendocrine tumors, or neuroendocrine tumors with symptoms controlled by systemic therapy.

Coding Information

The following list of codes are for informational purposes only and may not be all-inclusive. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.

47370 Laparoscopy, surgical, ablation of one or more liver tumor(s); radiofrequency

47371 Laparoscopy, surgical, ablation of 1 or more liver tumor(s); cryosurgical

47380 Ablation, open, of one or more liver tumor(s); radiofrequency

47381 Ablation, open, of 1 or more liver tumor(s); cryosurgical

47382 Ablation, 1 or more liver tumor(s), percutaneous, radiofrequency

47383 Ablation, 1 or more liver tumor(s), percutaneous, cryoablation

47399 Unlisted procedure, liver

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Related Policies

Microwave Ablation of Lung Tumors

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Appendix

Policy Number: [Policy Number]

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Policy type: Enterprise

Author(s):

Depts: Health Services

Applicable regulation(s): [Applicable Regulation(s)]

Commercial Ops: 2/2022

Government Ops: 2/2022