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Short Communication

Strategies for Treating Liver Hemangioendothelioma: Factors Influencing Mortality

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DESCRIPTION

Liver Hemangioendothelioma (LHE) is a rare type of cancer that originates from the cells that line the blood vessels, called endothelial cells. LHE can affect any part of the body, but it is most commonly found in the liver, lungs, and bones. LHE is also known as Epithelioid Hemangioendothelioma (EHE) or Hepatic Epithelioid Hemangioendothelioma (HEHE) when it occurs in the liver [1,2]. LHE is a low- to intermediate-grade malignant tumor, which means that it has the potential to spread to other organs and tissues, but it does so at a slower rate than high-grade tumors. LHE is also unpredictable in its behavior and growth pattern, as some tumors may remain stable or shrink over time, while others may grow rapidly and cause symptoms [3-5]. The exact cause of LHE is unknown, but it is not inherited or contagious. Some studies have suggested that LHE may be associated with certain genetic mutations or chromosomal rearrangements, such as the *WWTR1-CAMTA1* fusion or the *YAP1-TFE3* fusion, which affect the regulation of cell growth and differentiation. However, these genetic changes are not inherited from parents or passed on to children. The symptoms of LHE depend on the location and size of the tumor, as well as the involvement of other organs. Some people with LHE may have no symptoms at all and may only discover the tumor incidentally during an imaging test for another reason.

The diagnosis of LHE is based on a combination of clinical features, imaging tests, and biopsy results. Imaging tests such as ultrasound, Computed Tomography (CT), magnetic resonance imaging (MRI), or Positron Emission Tomography (PET) can help to detect and characterize the tumor, as well as to assess its extent and spread [6].Biopsy involves taking a small sample of tissue from the tumor and examining it under a microscope to confirm the diagnosis and to rule out other conditions. Biopsy can be done by using a needle inserted through the skin (percutaneous biopsy) or by surgery (open biopsy). Liver transplantation involves replacing the diseased liver with a healthy one from a donor. Liver transplantation can be an option for patients with unresectable tumors that are confined to the liver and who meet certain criteria for eligibility [7,8]. Liver transplantation can offer long-term survival and cure for some patients with LHE. Targeted therapy can be used alone or in combination with other treatments for advanced or metastatic LHE that cannot be removed by surgery or treated by liver transplantation. The most commonly used targeted therapy for LHE is sorafenib, which inhibits several enzymes that are involved in angiogenesis (the formation of new blood vessels) and cell proliferation. Sorafenib can help to slow down or stop the growth of LHE tumors and improve survival. Watchful waiting can be an option for patients with asymptomatic or stable LHE tumors that do not pose an immediate threat to life or function [9]. Watchful waiting can help to avoid unnecessary side effects and complications from treatments that may not improve survival or quality of life. The prognosis of LHE varies depending on several factors, such as the stage of the disease, the location and size of the tumor, the involvement of other organs, the response to treatment, and the patient's age and general health. In general, LHE has a better prognosis than other types of liver cancer, such as hepatocellular carcinoma or cholangiocarcinoma [10]. However, LHE can still be fatal if it spreads to other organs or causes complications such as liver failure or bleeding.

CONCLUSION

The treatment of LHE depends on several factors, such as the stage of the disease, the location and size of the tumor, the involvement of other organs, the patient's age and general health, and the patient's preferences and goals. Surgery involves removing part or the entire affected organ along with some surrounding normal tissue to ensure complete removal of the tumor. Surgery can be curative for localized tumors that have not spread to other organs. However, surgery may not be possible for multifocal tumors that involve both lobes of the liver or for tumors that are close to vital structures such as blood vessels or bile ducts. The 5-year survival rate for LHE ranges from 40% to 70%, depending on the treatment and the extent of the disease.

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REFERENCES

1. Shiba S, Imaoka H, Shioji K, Suzuki E, Horiguchi S, Terashima T, et al. Clinical characteristics of Japanese patients with epithelioid hemangioendothelioma: a multicenter retrospective study. BMC Cancer. 2018;18(1):1-7.
2. Deyrup AT, Tighiouart M, Montag AG, Weiss SW. Epithelioid hemangioendothelioma of soft tissue: a proposal for risk stratification based on 49 cases. Am J Surg Pathol. 2008;32(6):924-927.
3. Mehrabi A, Kashfi A, Fonouni H, Schemmer P, Schmied BM, Hallscheidt P, et al. Primary malignant hepatic epithelioid hemangioendothelioma: a comprehensive review of the literature with emphasis on the surgical therapy. Cancer: Interdisciplinary International Journal of the American Cancer Society. 2006;107(9):2108-21.
4. Lerut JP, Orlando G, Adam R, Schiavo M, Klempnauer J, Mirza D, et al. The place of liver transplantation in the treatment of hepatic epitheloid hemangioendothelioma: report of the European liver transplant registry. Ann Surg. 2007;246(6):949-957.
5. Otrock ZK, Al-Kutoubi A, Kattar MM, Zaatari G, Soweid A. Spontaneous complete regression of hepatic epithelioid haemangioendothelioma. Lancet Oncol. 2006;7(5):439-441.
6. Rodriguez JA, Becker NS, O'Mahony CA, Goss JA, Aloia TA. Long-term outcomes following liver transplantation for hepatic hemangioendothelioma: the UNOS experience from 1987 to 2005. J Gastrointest Surg. 2008;12:110-116.
7. Ben-Haim M, Roayaie S, Ming QY, Thung SN, Emre S, Fishbein TA, et al. Hepatic epithelioid hemangioendothelioma: resection or transplantation, which and when?. Liver Transpl Surg. 1999;5(6): 526-531.
8. Alomari AI. The lollipop sign: a new cross-sectional sign of hepatic epithelioid hemangioendothelioma. Eur J Radiol. 2006;59(3): 460-464.
9. Nudo CG, Yoshida EM, Bain VG, Marleau D, Wong P, Marotta PJ, et al. Liver transplantation for hepatic epithelioid hemangioendothelioma: the Canadian multicentre experience. Can J Gastroenterol. 2008;22:821-824.
10. Epelboym Y, Engelkemier DR, Thomas-Chausse F, Alomari AI, Al-Ibraheemi A, Trenor III CC, et al. Imaging findings in epithelioid hemangioendothelioma. Clin Imaging. 2019;58:59-65.