



Open Caudate Lobectomy for Treatment of Giant Symptomatic Giant Liver Hemangioma: A Case Report

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Abstract

Background: Hepatic Hemangiomas (HHs) are the most common benign liver tumors. Generally, they appear as single tumor and are common located in the right lobe. Sometimes, they present symptoms such as pain, fullness, respiratory restriction, jaundice and others. When symptomatic HH needs surgical resection that is the main therapeutic choice.

Case Report: Middle age male presented a symptomatic single giant HH in caudate lobe. He is both motorcyclist and soccer player. He underwent an open caudate lobectomy by left approach and he presented none postoperative complication. To date, 18 months after hepatic resection, he presented a good quality of his life without any recurrence.

Conclusion: Although open caudate lobectomy is a technical demanding resection, it is very safe when performed by liver surgery experts. It can present a good result in long-term when is chosen to treat a large HH located in caudate lobe like we observed in this case report.

Keywords: Hepatic hemangioma; Caudate lobectomy; Hepatic neoplasm's/surgery; Liver/surgery; Hepatectomy

Introduction

HH is second the most common liver tumor after hepatic metastasis and most benign tumor in the liver. Generally, it is more common in female gender with the peak of incidence around third and fifth decades [1,2].

Their sizes can vary from few millimeters until over 20 cm. Although in the past HH with 4 cm or more were designated as giant hemangiomas, over the last years this concept has been changed, and nowadays it has been considered only to the HH with 10 cm or more in diameter [1-4].

Almost lesions are symptomatic, and they are incidentally discovered by means of image examinations for unrelated conditions. Once symptomatic or even when presents complications, surgical resection can be the choice treatment [1-5]. As enucleation as anatomic resection can be performed to treat these lesions [1-5]. HH in Caudate lobe is rare and it presents a surgical challenger even for skilled team. Although, the mortality of these procedures is relatively low in skilled hands, the overall morbidity is still high [6-10]. Present authors report a case of single giant HH in caudate lobe whose patient underwent an open caudate lobectomy by left approach and presented none postoperative complication. To date, 18 months after hepatic resection, he presented a good quality of life without any recurrence.

Case Presentation

Thirty years-old male presented fullness and abdominal pain and he was investigated by means imaging studies. He was both motorcyclist and soccer player. Abdominal CT revealed a vascular lesion compatible with giant HH with 10 cm of diameter in caudate lobe (spiegel lobe and right paracaval space) (Figure 1). He underwent a successful open caudate lobectomy by left approach and he carried out hospital at 4th postoperative day without any postoperative complication. A histological analyses confirmed cavernous hemangioma without complications.

To date, 18 months after hepatic resection, he is alive without either symptoms or recurrence (Figure 2). Currently, he also presents an excellent quality of his life, besides that he has returned to play football and ride a motorcycle.

Discussion

HH is a very common liver tumour; ranking in the top three most commonly diagnosed liver

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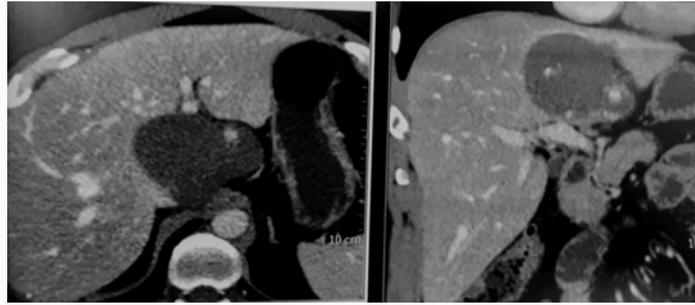


Figure 1: Preoperative Contrast-enhanced CT- Large HH in Caudate Lobe.

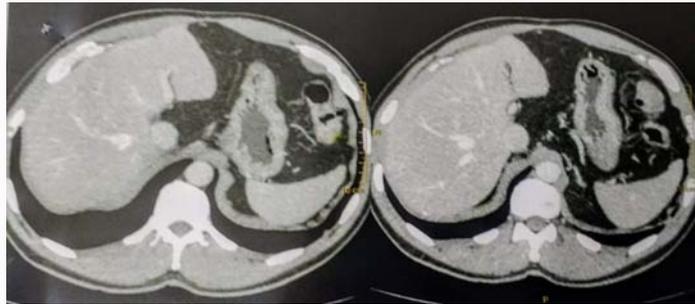


Figure 2: Postoperative Contrast-enhanced CT (18 months after Caudate Lobectomy)- Absence of the Caudate Lobe.

tumors around the world [1]. It has been estimated that unless between 10% until 20% of worldwide population present HH [1-3]. Among those patients, almost they are female in childbearing or even middle age. In most cases its localization is on the right lobe and its size can vary between few millimeters until over 20 cm [1-4]. A few cases have been described in caudate and they present particular difficulties to the surgical treatment. Now a day, giant HH has been designated those cases that present 10 cm or more of diameter [2-4]. Generally, HH presents an indolent behaviour, besides that the majority are asymptomatic in which are discovered by image studies [2]. Exceptionally they can grow quickly attaining great size.

Once symptomatic, HHs present a varied types of clinical presentations, the most described are: abdominal pain and fullness like presented in this case report, nausea, vomiting, palpable mass or more infrequently also respiratory restriction, jaundice, cardiac insufficiency [1-5]. Infrequently HH can present complications such as rupture, Kasabach-Merritt Syndrome, and fever [1-4]. Although surgical resection is seldom indicated, it has remained as main choice treatment for either symptomatic or complicated cases. As enucleations as anatomic resection are enough for surgical treatment of the HHs, logically sparing parenchyma resections should be preferred because it's benign behaviour. Then an anatomic resection is just tactical mainly for central positioned and large lesions in which are close to the major vascular structures, like this case report [1-10]. HHs of the caudate lobe are very difficult lesions for resection because and they involve great expertise in liver surgical due particular position of this hepatic lobe [8,9].

Generally, left approach like used in this case is safer besides easier approach to perform, and it is the ideal approach for large masses in Spiegel lobe [7]. We could observe neither major bleeding nor a transfusion with this approach in this case that has shown how this access can be safe as described by Feng et al., [7]. Although caudate lobectomy could be performed by means of laparoscopic approach

for caudate lesions and our team has great expertise in laparoscopic hepatectomies (as for benign as for malignant lesions treatment, we have elected the resection by open approach because this lesion had large dimensions and it was very close to the vena cava [11-13]. In our view point laparoscopic approach in this specific case would be at least very dangerous and difficult to perform. To date, 18 months after caudate lobectomy, this patient is alive with a great quality of his life. He has returned to the daily activities such as to play soccer and to ride a bike. Besides that, he presents no lesion recurrence.

Conclusion

In some, we have concluded that although open caudate lobectomy could be a technical demanding resection, it is very safe by means of the left approach mainly when performed by liver surgery experts. It can present a good result in long-term when is chosen to treat a large HH located in caudate lobe like we observed in this case report.

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