Topic : Liver

ROBOTIC LEFT HEMIHEPATECTOMY FOR LARGE HEMANGIOMA WITH MIDDLE HEPATIC VEIN COMMUNICATION: DUAL-DIRECTIONAL APPROACH

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Background : Hepatic hemangioma adjacent to major vessels presents technical challenges during resection, particularly when communicating vessels are present. This case demonstrates a strategic robotic approach for left hemihepatectomy in managing a large hemangioma with middle hepatic vein (MHV) communication.

Methods : A 45-year-old female presented with chest pain and was diagnosed with multiple hepatic hemangiomas. Preoperative CT revealed a large left-sided hemangioma abutting the MHV with suspected communicating vessels. Robotic left hemihepatectomy was performed using the Xi system with umbilical glove port placement. The surgical approach combined individual hilar dissection and a two-directional strategy: cranio-dorsal and caudo-ventral approaches.

Results : The operation was successfully completed in 359 minutes with controlled Pringle maneuver time of 79 minutes. Key technical aspects included initial left hepatic vein isolation and division using robotic stapler, followed by careful tumor detachment from MHV. A large communicating vessel between the tumor and MHV root was identified and safely divided using a robotic stapler. The patient recovered uneventfully and was discharged on postoperative day 6.

Conclusions : This case highlights the effectiveness of a systematic robotic approach in managing complex hepatic hemangiomas with vascular involvement. The dual-directional approach facilitated safe management of the tumor's vascular components, particularly the challenging MHV communication.

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