# A Case of Benign Multicystic Peritoneal Mesothelioma

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## Introduction

Multicystic peritoneal mesothelioma (MCPN) is a rare neoplasm originating from the peritoneum most commonly in pre-menopausal females. It accounts for 3-5% of peritoneal mesotheliomas. The objective is to describe the workup and management of MCPN.

## Case Summary

- 47 year old female with no PMH presents with RLQ pain radiating to the back for 3 days. Also reports 6 pounds weight loss over one year. A CT abdomen pelvis revealed a multilobulated, multiseptated, well circumscribed cystic mass 8.0x4.7x7.9cm in size abutting the inferior aspect of the gallbladder extending anteriorly to the right kidney into the paracolic gutter. A RUQ US was obtained to further characterize the cystic mass. US revealed a 4.4x7.7x9.3cm multiseptated cystic mass, suspicious for exophytic complex hepatic cyst. No mural nodularity or abnormal mural hypervascularity was seen. Tumor markers LDH, CA 125, and CEA were negative.
- The decision was made to resect the cyst via laparoscopic approach. Upon entry into the LUQ, the cyst was noted to be extraperitoneal with adhesions to the peritoneum of the gallbladder, hepatic flexure of the colon, right colon, and small bowel. The adhesions to the peritoneum were dissected with ligasure and blunt dissection until the specimen was dissected free. Pathology revealed benign multicystic mesothelioma.

## Figures

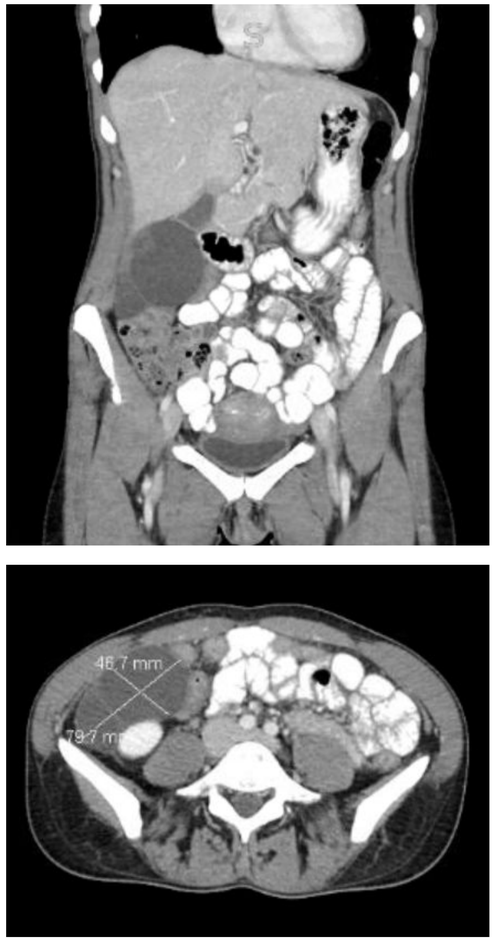



Figure 1. CT showing cystic structure abutting the right kidney, liver, and gallbladder

## Discussion

- Unlike malignant mesothelioma, there is no consensus on the cause of MCPN. Chronic inflammation caused by previous surgeries, endometriosis or peritoneal dialysis may be associated with MCPM. MRI is considered the best imaging technique as it best differentiates MCPM from other cysts [1]. High Ca 19-9 serum concentrations are also found to be associated with MCPM.
- Laparoscopy is the best way to obtain definitive diagnosis and to evaluate the extent of disease. Complete resection of the tumor is the most common treatment, however, due to a recurrence rate of almost 50% within 2 years and risk of malignant transformation, alternatives with HIPEC and CRS have been suggested with recurrence rates of ~20% [2]

## Conclusions

- MCPM is a rare neoplasm which closely resembles other cystic lesions. There is no definitive diagnosis or treatment recommendation, although complete resection is most favored.

## References

- [1] PMID: 31667333
- [2] PMID: 23341809