

The 74th annual meeting of the Japan Radiological Society

Case 7: Answer

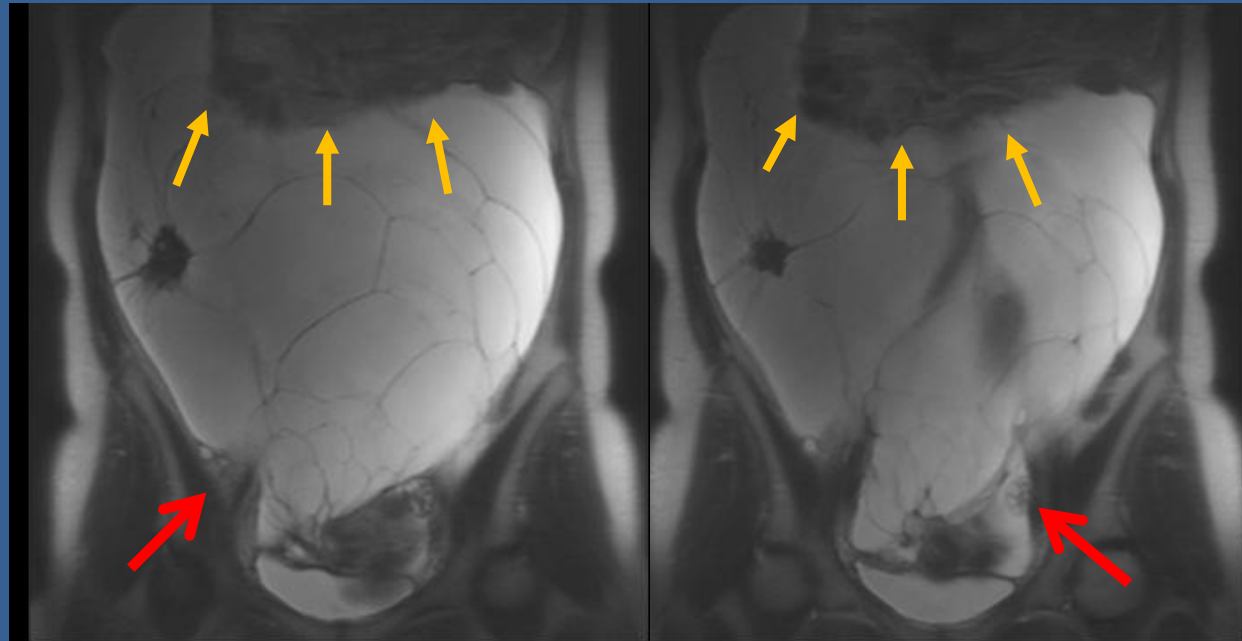
from Nihon University School of Medicine

Clinical Summary

- **A 30-year old woman with abdominal distention**
- **An abdominal mass incidentally identified by US**
- **L/D: normal**
- **Past history: unremarkable**

Image findings

- Multilocular cystic mass with simple fluid intensity
- T2-hypointense solid part with weak enhancement
- No hemorrhage, fat, or calcification
- Displacing the intestine upward (vector from the pelvis)
- Normal bil. ovaries (red arrows)
- Multiple uterine leiomyomas



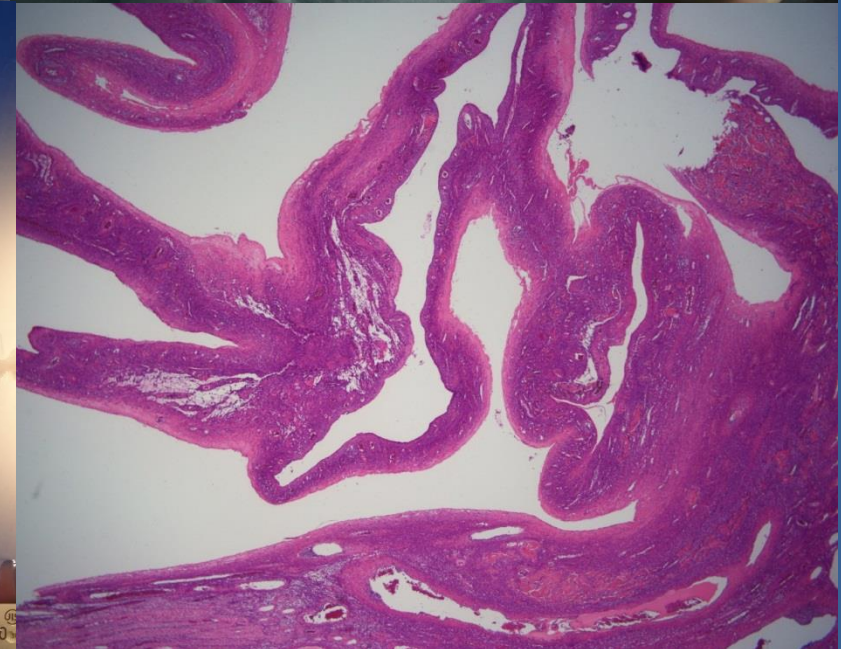
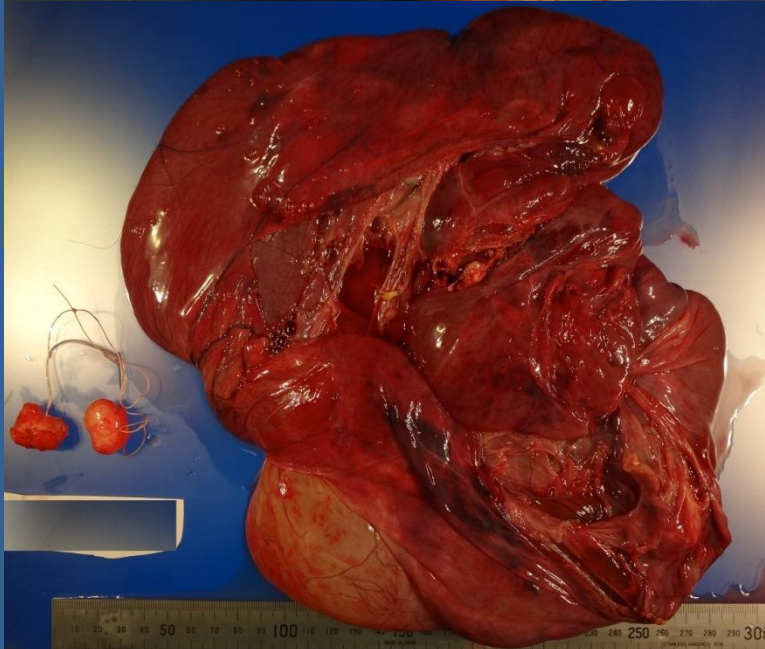
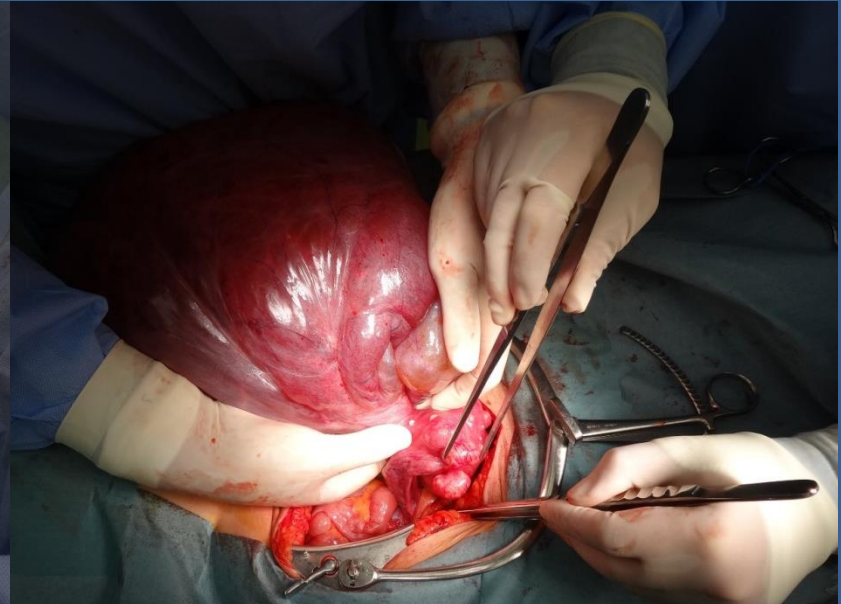
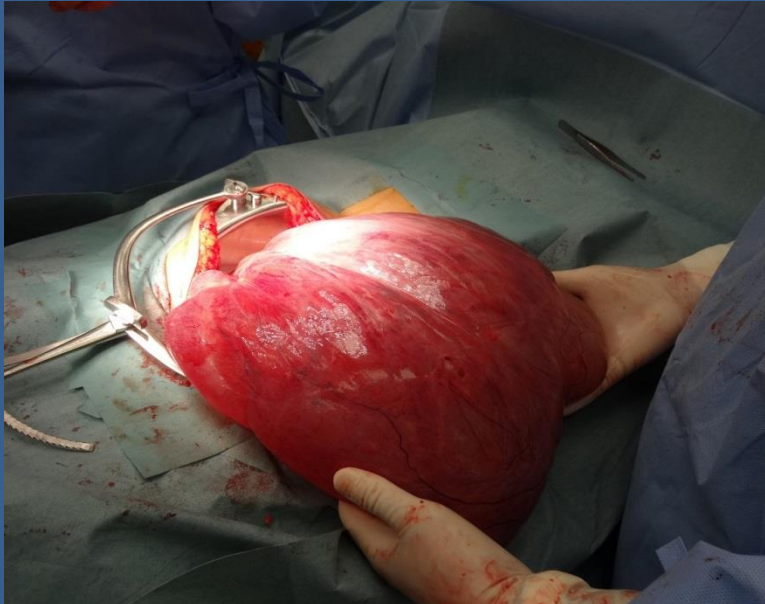
DDx: abdominal multilocular cystic mass

Pseudomyxoma peritonei	mass effect (+)
Lymphangioma	normal bil. ovaries
Cystic mesothelioma	weak enhancement
Peritoneal inclusion cyst	
Peritoneal Mullerian adenocarcinoma	

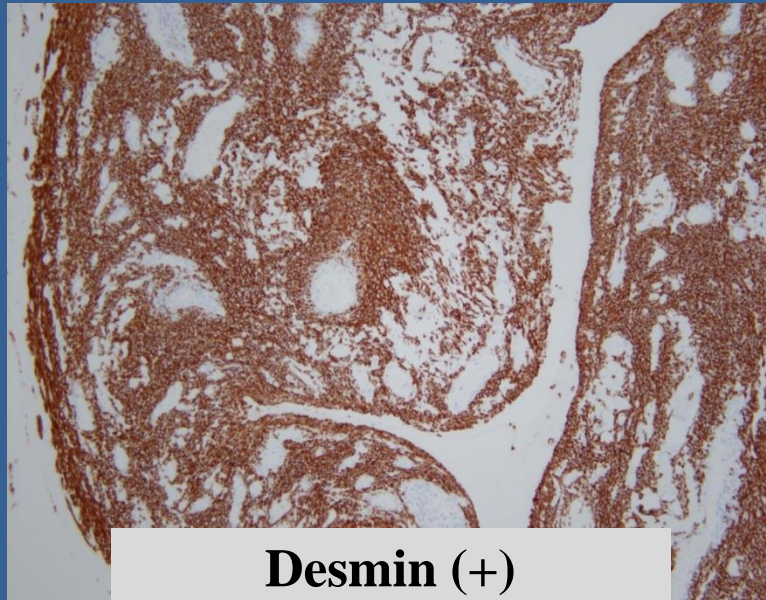
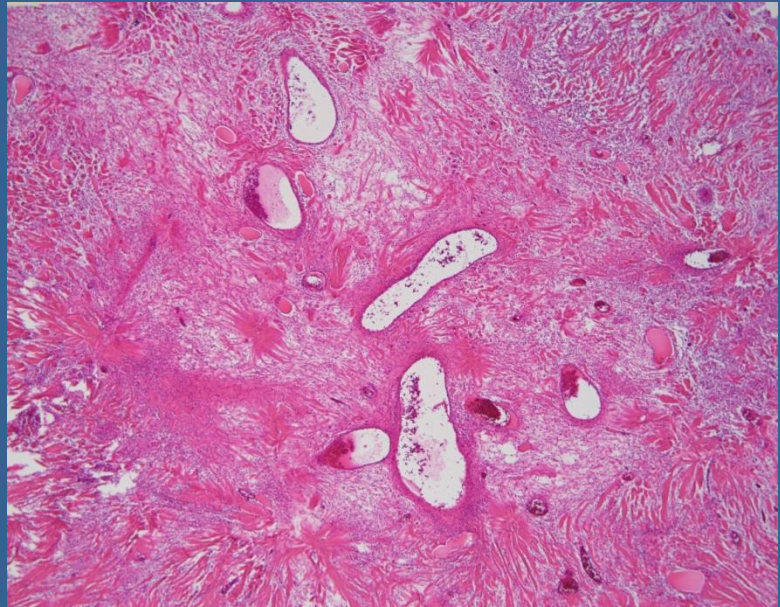
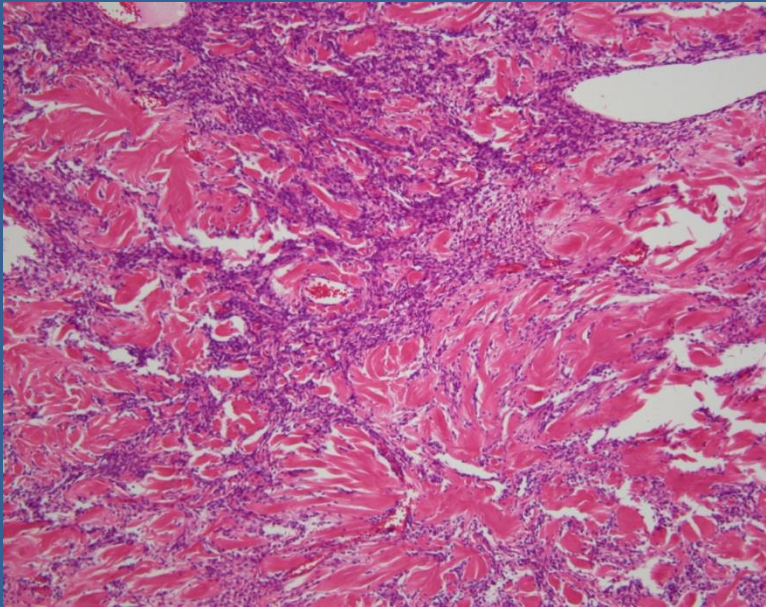
Uterine leiomyoma with cystic degeneration
(hydropic leiomyoma)

Ovarian mucinous cystadenoma	Brenner tumor
Struma ovarii	

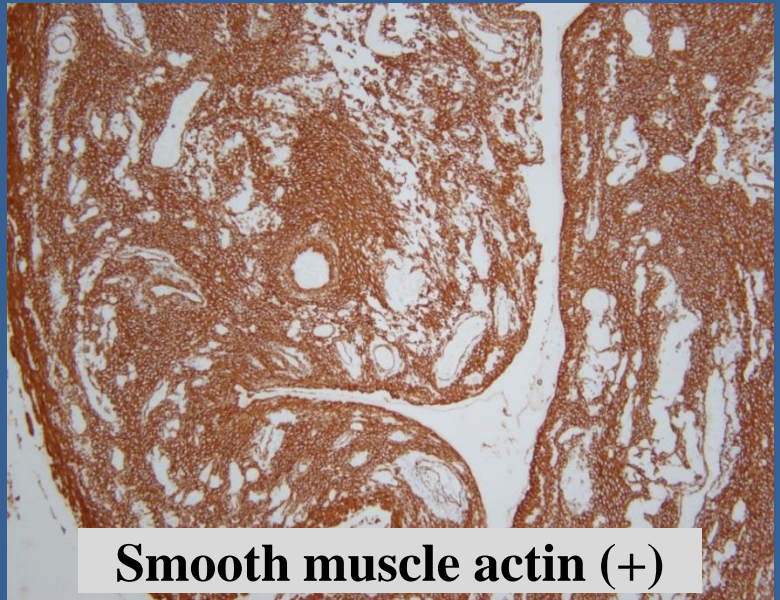
Pathology



Pathology



Desmin (+)



Smooth muscle actin (+)

Final Diagnosis

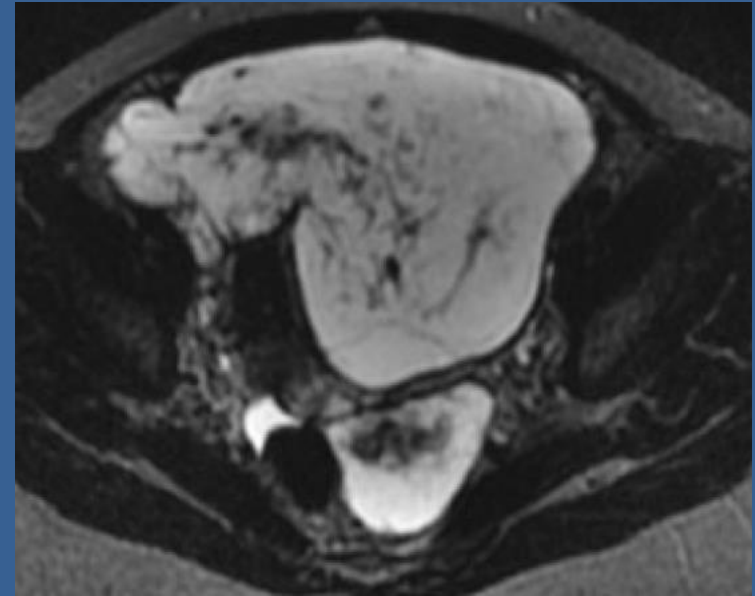
**Hydropic uterine leiomyoma
(pedunculated, subserosal)**

Degeneration of leiomyoma

- Calcification
- Hyaline degeneration
- Myxoid degeneration
- Fatty degeneration
- Red degeneration
- Cystic (hydropic) degeneration

rare (4% of leiomyoma)

extreme sequela of hyaline degeneration



Hefferman, et al. Br J Radiol 2009;82:e164-7

Take Home Points

- Uterine leiomyoma can show various patterns of degeneration and present with atypical image findings, including prominent cystic (hydropic) changes.
- Presence of other uterine myomas and normal bil. ovaries can be the clues.
- When you see a large intraperitoneal mass in a woman, ovarian and uterine origin should be ruled out first.
In case of a man with a huge retroperitoneal tumor, malignancy in undescended testis is the first DDx. So check the inguinal canal.

References

1. Heffernan E, Köbel M, Spielmann A: Case report: Hydropic leiomyoma of the uterus presenting in pregnancy: imaging features. Br J Radiol. 2009;82(980):e164-7.
2. Amant F, Gabriel C, Timmerman D, Vergote I: Pseudo-Meigs' syndrome caused by a hydropic degenerating uterine leiomyoma with elevated CA 125. Gynecol Oncol. 2001;83(1):153-7.