



Leiomyomatosis Peritonealis Disseminata and Meningioma- A rare association

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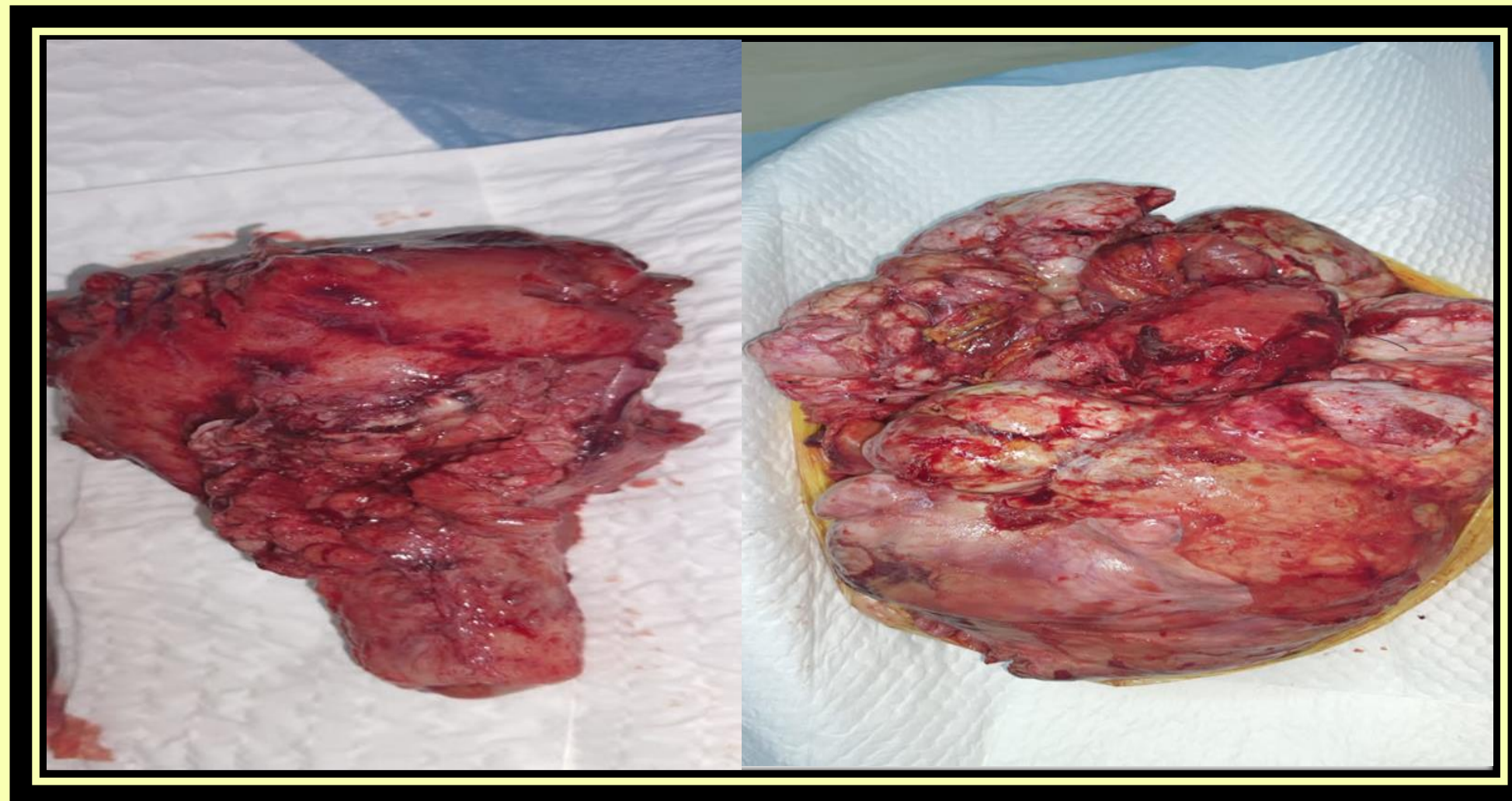
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INTRODUCTION

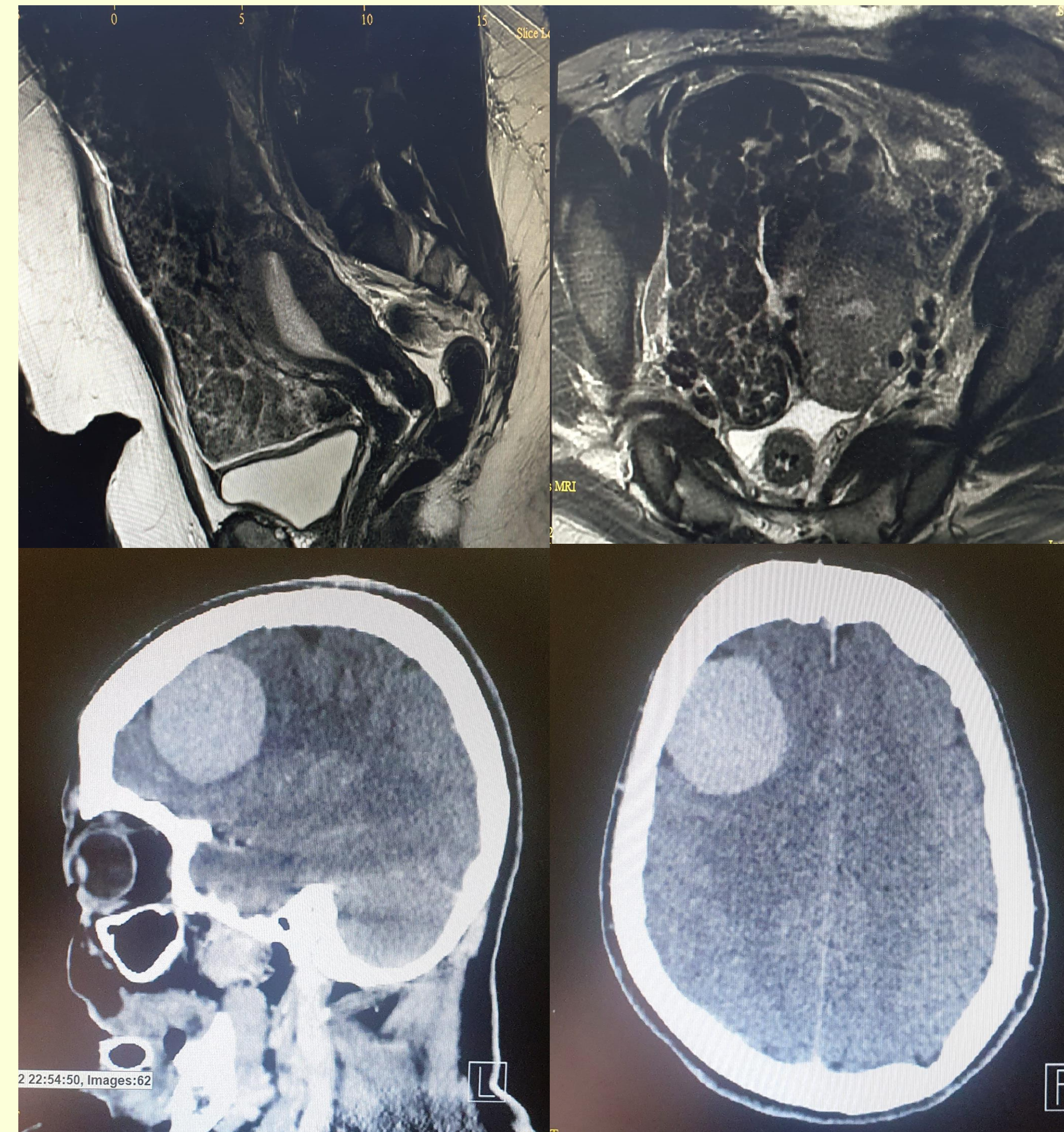
- Leiomyomatosis peritonealis disseminata is a rare benign gynecological disorder characterized by the dissemination of multiple smooth muscle nodules throughout the peritoneum.
- An association between hormones and meningioma risk has been suggested by the increased incidence of post-pubertal disease in women versus men (2:1) with the highest ratio of 3.15:1 during the peak reproductive years.
- The presence of estrogen, progesterone and androgen receptors on some meningiomas(1), (2) indicated by the increase in size of the meningioma during the luteal phase of the menstrual cycle, pregnancy and exogenous hormones.(3)

CASE REPORT

- A 39 year old, multiparous, with complains of dyspepsia and bloatedness 5 years back was diagnosed as Disseminated Peritoneal Leiomyomatosis on MRI .
- In 2022, she was seen during the antenatal period which was uneventful. She underwent Caesarean section for pathological CTG, biopsy taken from the peritoneal mass confirmed the diagnosis.
- On post operative day 6, she was admitted with Status Epilepticus.
- EEG : Focal epileptiform activity from the right fronto-temporo-parietal region.
- CT brain with angiography : a right frontal meningioma.
- With increasing ascites, proceeded with Excision of the tumour and Total Abdominal Hysterectomy with Bilateral salpingectomy.

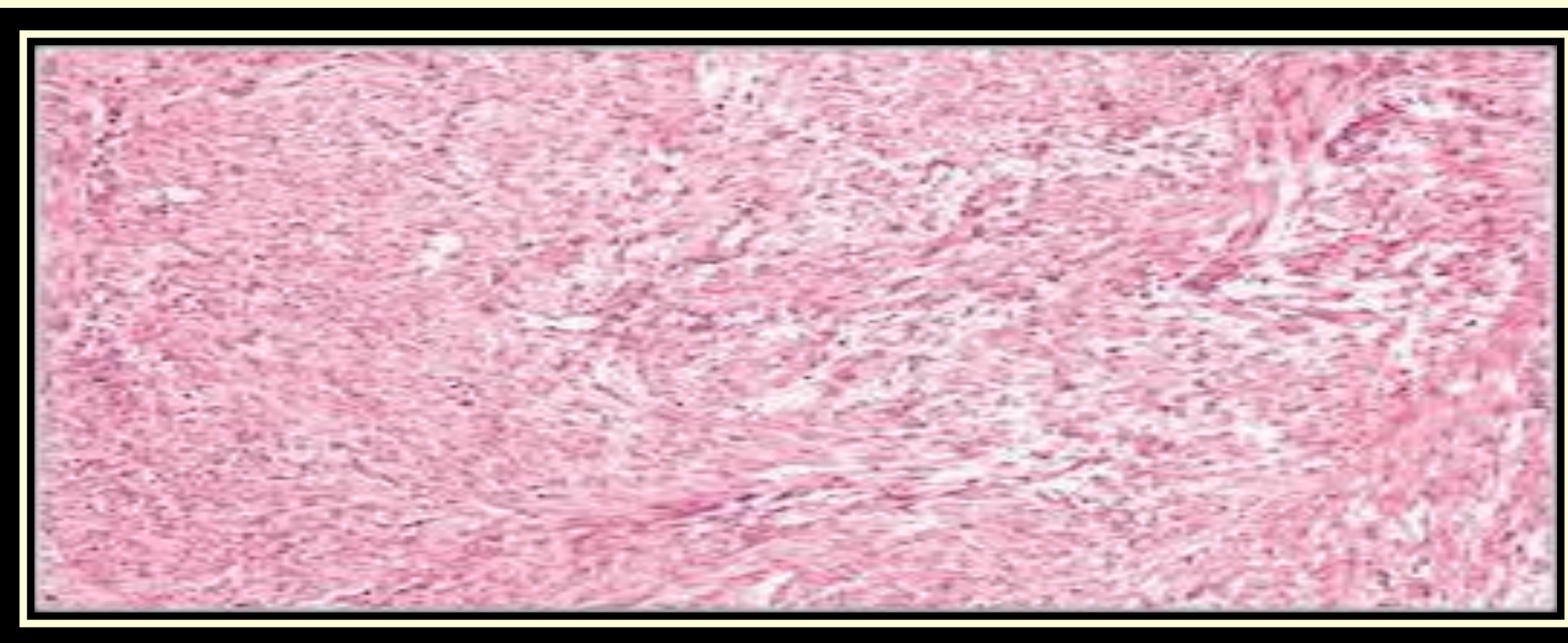


IMAGING



PATHOLOGY

- MACROSCOPY: Uterus of 12 weeks size with subserosal fibroid extending to involve the entire peritoneum ,bladder serosa and omentum. The mass weighed 8kg.
- .MICROSCOPY: Diffuse benign leiomyomatosis with signs of degeneration with no evidence of infection or atypia.



DISCUSSION

- LPD could be caused by metaplasia of mesenchymal cells of the peritoneum into smooth muscle cells may be promoted by estrogen exposure.(4) Therefore, LPD is often considered a premenopausal benign disease.
- An association of multiple intracranial meningioma presentation with long standing use of a progesterone agonist which was confirmed histologically by the presence of progesterone receptors on the largest tumor. Regression of the tumor was noted with discontinuation of the medication.(4)
- Studies have shown a stronger association with PR than with ER status.(1)
- Intracranial leiomyoma may be primary or secondary presentation. Various cases of primary intrasellar leiomyoma has been reported which was confirmed by histology, immunohistochemistry and electron microscopy.(5)(6)

CONCLUSION

Surgery is the main stay of treatment for leiomyomatosis peritonealis disseminata.

Although rare, leiomyoma should be considered in the differential diagnosis of well-circumscribed intracranial lesion.

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