

## **The use of hormone suppressant agents among (6) women with hepatic endometriosis:**

(Augment to Hepatic Endometriosis: Treatment-Hormone Suppressants)

- 1.) First woman, premenopause with a history of pelvic endometriosis underwent a percutaneous biopsy (CT guided) which confirmed a 5cm hepatic endometrioma.(7) She refused surgical intervention and selected Danazol for medical management. The article does not provide remote follow-up for effectiveness of intervention and outcomes.
  
- 2.) Second woman, premenopause with a history of pelvic endometriosis(4). She was offered Danazol to treat an ovarian endometrioma and uterine fibroid three years prior. At reassessment, an incidental hepatic lesion documented. The endometrioma and fibroid had not reduced significantly in size. (In this case, Danazol was not used to treat the hepatic lesion. It was used prior to treat pelvic endometriosis. A lack of significant lesion size reduction and inability to obtain an accurate diagnosis of liver cyst through conservative testing, enucleation of the left lobe lesion was performed. No long term outcomes are stated.

- 3.) Third woman, premenopause without a history of pelvic endometriosis, had recently discontinued oral contraceptive to conceive.(3) She had endured right upper quadrant pain for two (2) years. A significant increase in pain occurred when Oral Contraceptive Pill (OCP) was discontinued. A presumptive diagnosis of hepatic endometriosis was made based upon MRI findings that the investigator reports "were consistent with an endometriotic hepatic lesion".(3) Lesion decreased from 6cm to 3cm diameter following four (4) month treatment with GnRH-a. The treatment was discontinued due to the patients desire to conceive. The woman underwent surgical resection (and confirmation lesion was endometriosis). It is unclear if continued use of the GnRH-a would have completely resolved the hepatic endometrioma.
  
- 4.) Fourth woman premenopause, was treated with Goserelin x one year following marsupialization of a 6cm endometrioma at laparotomy. Over a year following discontinuation, endometrioma regrowth to 11cm. A second liver resection and addition of cholecystectomy and diaphragm reconstructon was performed.

However, based upon the next two cases, whom are both post menopause(10,15) (surgically induced >5 and >8 yrs prior and without HRT use >1 yr and >3 yrs respective), use of hormone suppressant (administered to castrated women)

found variable size reduction without resolution during their use.

- 5.) Fifth woman, postmenopause, no size reduction was found in the liver lesions after leupron acetate injections x 5 months (Right Lobe: 12cm x 10cm, Left Lobe: 5.5 x 4.0 x 3.8cm) (10). She underwent surgical resection of the right lobe only. She received intranasal Goserelin postoperatively to treat the left lobe lesion. Preoperative percutaneous biopsy was performed on the right lobe lesion but not left. Endometriosis was confirmed for the right lobe lesion. The left lobe lesion is assumed endometriosis based upon similarities of CT imaging. A year later, while still receiving intranasal Goserelin, the woman presented to the ER with fever and epigastric pain. US confirmed continued presence of left lobe lesion. At that time a diagnostic percutaneous biopsy and drain of the cyst was completed. Isolated coliforms and purulent drainage was present without identification of endometrial components. The authors suggest the left lobe lesion was, in-fact an uncapsulated endometrioma that became septic. This diagnosis was based on similar imaging findings of the right liver lobe lesion, which had needle biopsy confirmation. For myself, it is unclear if the left lobe lesion was an endometrioma, and thus the lesion was a long term abscess that responded to draining and antibiotic treatment and not the intranasal Goserelin.

A similar case with two lesions within the liver. A percutaneous biopsy only of the left lobe lesion was found inconclusive. An additional screening was given for Eschinococcal. Positive results led to treatment for a hydatid cyst. The right lobe cyst resolved with antibiotic treatment. However, the left lobe lesion was unchanged per CT Scan with continued symptoms. Partial hepatectomy was performed.(32)

- 6.) Sixth woman, postmenopause woman underwent hormone suppression during two separate time periods. The first intervention saw reduction but not resolution of the hepatic lesion (11cm x 7cm reduced to 2cm diameter; Leuprolide acetate injections of unknown duration). About three (3) years later, symptoms returned. The woman's symptoms led to interim misdiagnoses as a right shoulder injury, and pneumonia. A follow-up CT imaging confirmed regrowth of the hepatic endometrioma. It had grown beyond its original size three years prior. (15)