CODEN [USA]: IAJPBB ISSN : 2349-7750

INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES

SJIF Impact Factor: 7.187

https://doi.org/10.5281/zenodo.6405532

Available online at: http://www.iajps.com *Case Report*

RESECTION OF AN OVARIAN ENDOMETRIOSIS (ENDOMETRIOSIS CYST): A CASE REPORT

Dr.Walid Houchimi[1], Dr Khalid Alqahtani[2]

[1]Abha Maternity and children Hospital (consultant obstetric and gynecology

[2]Medical Intern King Khalid University.

Article Received: January 2022 **Accepted:** February 2022 Published**:** March 2022

Abstract:

A 44 years old Saudi female presented with chronic right iliac pain for five years. The patient is gravida 21, parity 14, with 7 abortions. All of the previous successful deliveries were normal vaginal delivery expect 3 that were Caesarian sections (CS). The patient is positive for Hepatitis B. Tru-cut biopsy was taken and histopathological report diagnosed the mass as endometriosis. Endometriosis cyst removal elective surgery was performed for the 9x8x3 cm cyst and the patient had no post-operative complications.

Corresponding author:

Walid Houchimi,

Abha Maternity and children Hospital

(Consultant obstetrics and gynecology)

QR code

Please cite this article in press ***Walid Houchimi*** *et al,* ***Resection Of An Ovarian Endometriosis (Endometriosis Cyst): A Case Report.,*** *Indo Am. J. P. Sci, 2022; 09(3)*

BACKGROUND:

Endometriosis is a chronic disease that causes painful pelvic discomfort and infertility in women (Gylfason et al., 2010). It is a chronic hormone-dependent inflammatory condition described by the presence of endometrial-like tissue or 'lesions' outside the uterus cavity, commonly inside the pelvis (Bulun et al., 2009; Vercellini et al., 2014). Endometriosis affects 6-10% of women of reproductive age, according to the World Endometriosis Society (WES) (http://endometriosis.ca/). This ratio is comparable to the percentage of women in the UK who suffer from diabetes or asthma.

Peritoneal endometriosis (PE), ovarian endometriomas (OE), "endometriosis cysts," and deep endometriosis (DE) are the three kinds of endometriosis. Endometriosis can be classified into four stages (I-minimal, II-mild, III-moderate, and IV-severe) at the time of surgery, depending on the location, extent, and depth of invasion of the endometriosis lesions (Schultes, 1999). "Endometriosis has a major socioeconomic effect due to its influence on the quality of life (QOL) of women with endometriosis, their families, and the expenses to healthcare systems" (Simoens et al., 2012, Simoens et al., 2007).

Ovarian endometriosis "OE" commonly manifests as dark brown cystic forms known as chocolate cysts. The OE does not enter the ovary, but the endometriotic hematoma most likely clings to the ovarian's surface. Surface epithelium, endometrial-like mucosa, and highly vascularised stroma line these cysts, partly or fully (Brosens et al., 2004). In roughly 5% of women with endometriosis, bleeding, twisting, or rupture of these cysts can induce an urgent abdominal emergency requiring surgical intervention (Schenken, 1996).

Case presentation

The patient is a 44 years old Saudi female who resides in Abha, Saudi Arabia, and is currently a housewife. The patient chief complaint is right lower abdominal pain (right iliac fossa) for 5 years duration.

History of present illness

Pain started 5 years ago. The pain is colicky in nature with radiation in the both legs that is associated with lower limb numbness. The pain increases before and during menstruation, as well as when she performs work in home and when she carries heavy objects or when standing for a long time. The pain is relieved by leaning forward and relaxing. The pain is associated with dizziness and not associated with vomiting nor diarrhea and there is no history of fever. The severity of pain is 7 on a scale of 10. The patient denied taking any medication nor any kind of pain killers at her follow up in the gastroenterology clinic.

Past medical history

The patient has hypertension for 10 years, that is controlled by medication. The patient has been infection with Hepatitis B 30 years ago due to a blood transfusion during a Caesarian section; her husband is vaccinated and all but her first offspring are Hepatitis B free. No history of contraception use.

Past surgical history

The patient has a regular menstrual cycle, normal menstrual blood flow and the average duration of menstrual bleeding is 7 days. There is no history suggesting premenstrual syndrome, intermenstrual bleeding, nor postictal bleeding.

The patient is gravida 21, parity 14, with 7 abortions. All of the previous successful deliveries were normal vaginal delivery expect 3 that were Caesarian sections (CS). The first CS was done because the patient was bleeding and she received blood transfusion, whereas the second and third CSs were due to preeclampsia.

Family history

The patient's five brothers are Hepatitis B positive. Her father has hypertension for over 30 year duration and he is on medication.

Social history

The patient is illiterate, not employed, and no history of travel. Her husband 50 years old he is hypertensive for 5 years that is controlled by medication. Her husband has hypothyroidism for which he took thyroxin 25 mcg daily for 3 years. He is not smoker and he also has no history of travel.

Examination

On general examination, patient looks ill, and on pain. The patient was vitally stable with normal blood pressure. Hand examination showed no sign of cyanosis no clubbing no koilonychia no palmer erythema. Eye examination revealed minimal sign of jaundice and no pallor. Oral examination reveals no pallor, no cyanosis, no artificial teeth, and good oral hygiene. Neck examination is normal for thyroid and there is no lymphadenopathy. Chest and cardiac examination were normal.

Abdominal examination

By inspection, there was no dilated veins, normal umbilical shape. The abdomen was slightly distended and there is scar of previous CS. The abdomen was symmetrical and there are no signs suggesting hernia. By palpation, there is tenderness and there is a palpable mass in right iliac fossa. There is no sign of splenomegaly. Liver palpation revealed normal measurements. Other system examination were normal.

Management plan

The patient undergone an abdominal ultrasonography and there were findings suggesting endometrial cyst, from which we took a tru–cut biobsy and sent it to histopathology for examination. The histopathological report for the tru-cut specimen was issued on April 29, 2021 and it revealed a lesion that is ER and CD10 positive, which was compatible with endometriosis.

A battery of tests was ordered that confirmed that the patient is positive for hepatitis b. No other significant findings were reported. The patient was scheduled for endometriosis cyst removal admitted for elective surgery on February 20, 2022, which is two days prior to the operation. Operation time was 43 minutes in which the endometriosis cyst was completely resected (figure 1-2) and send for histopathologic examination.

Histopathological report for the resected mass revealed that the mass grossly is fibrofatty that measures 9x8x3 cm, whereas microscopic examination revealed that sections show adipose tissue containing endometrial tissue. The specimen showed no signs of malignancy.

After the surgery, the patient was prescribed intravenous fluids (125 ml/hr), omeprazole injection (40 mg once), primperan injection (10 mg once), captopril tablets (25 mg once daily), cefazolin IV (1 gm BID), flagyl IV (500 mg BID), clexane s.c. (40 mg once daily), and paracetamol IV (1 g TID).
The patient was then discharged with no post-operative complications and she was prescribed flagyl PO (500 mg TID for 5 days), clexan s.c. (40 mg once daily for 8 days), and augmentin PO (625 mg BID for 7 days).

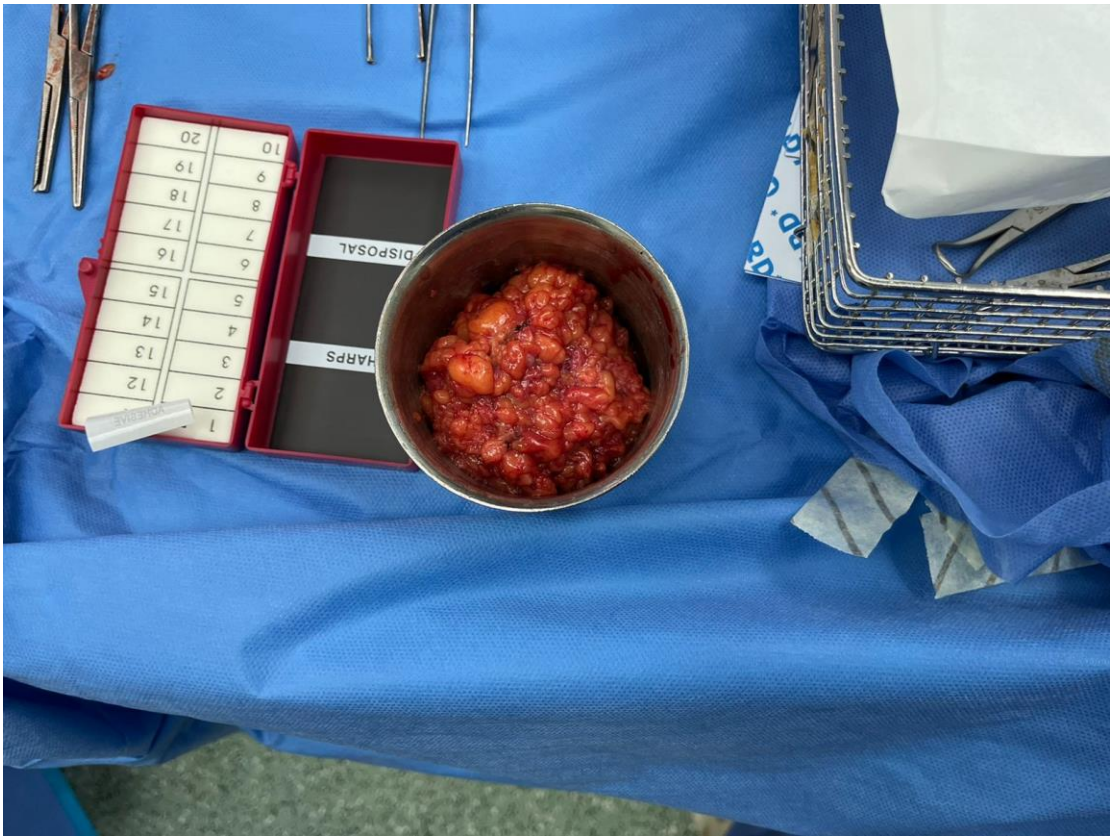

Figure (1): Endometriosis cyst after resection.

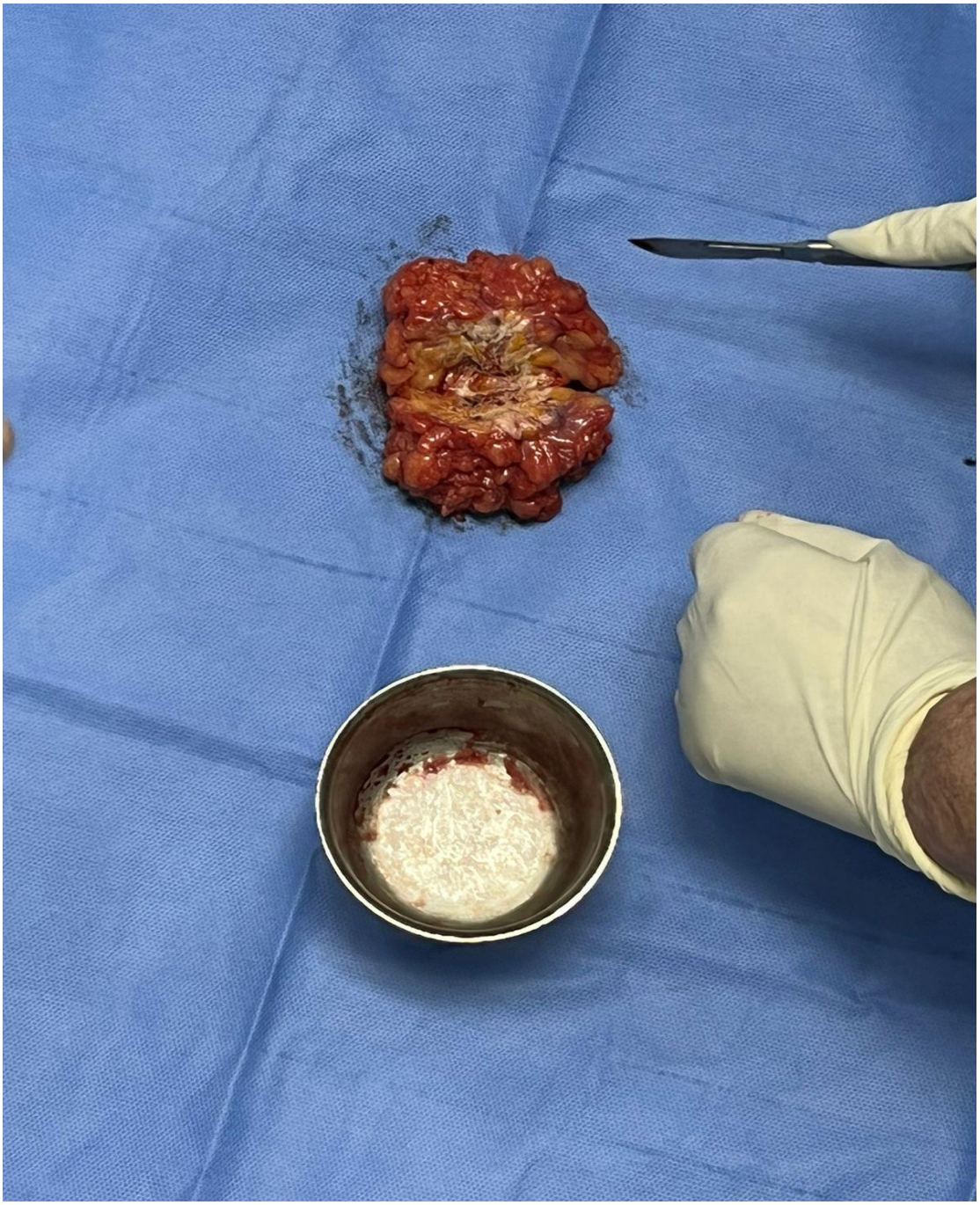

Figure (2): Endometriosis cyst dissection.

DISCUSSION:

Endometriosis affects about 176 million women worldwide (Adamson et al., 2010), with a frequency of 0.5–5% in fertile women and 25–40% in infertile women (Adamson et al., 2010). (Ozkan et al., 2008). Endometriosis is expected to afflict 1.5 million women in the United Kingdom (www.endometriosis-uk.org), accounting for around 10% of all gynaecological consultations (Bijlani and Sonaware, 2012).

Endometriosis is caused by a combination of environmental and genetic factors, and it is believed that endometriosis is inherited in roughly 51% of instances. Many research have backed up the idea that hereditary variables have a role (Simpson and Bischoff, 2002, Treloar et al., 2002, Zondervan et al., 2001). Endometriosis has been studied in four genome-wide association studies, two in European populations and two in Japanese populations (Hino et

al., 2010). Three of these investigations found substantial signals throughout the whole genome.

The reason why some women develop symptomatic endometriosis but not all do is still unknown, although it is a hotbed of scientific effort (Vitonis et al., 2014). Retrograde menstruation, increased immunity, germinal epithelium metaplasia, and hormone components have all been postulated as possible causes (Macer and Taylor, 2012).

Chronic pelvic pain (CPP) and sub- or infertility (Giudice, 2010) are the two most often reported endometriosis symptoms, and both result in high healthcare expenses and impaired quality of life (Simoens et al., 2012). Despite the fact that this woman is fertile, endometrial lesions have been observed in up to 50% of symptomatic women visiting infertility clinics (Zondervan et al., 2001, Meuleman et al., 2009).

Women's symptoms alone can be used to make a preliminary diagnosis of probable endometriosis. However, because many of the symptoms of endometriosis are the same or very similar to those of other gastrointestinal, urological, or gynaecological diseases, such as irritable bowel syndrome, pelvic floor spasm, and painful bladder syndrome, a definitive diagnosis can only be made after surgical investigation (Kennedy et al., 2005).

There are presently no accurate non-invasive diagnostic tests, ultrasound scans, magnetic resonance imaging (MRI), or biomarkers for endometriosis, and diagnosis requires direct visualisation by laparoscopy verified by histological testing (Kennedy et al., 2005).

Endometriosis management is difficult, complicated, and sometimes unsatisfying. There is currently no cure for endometriosis, and the major treatment choices for controlling the symptoms associated with this health problem are medicinal and surgical treatments (Dunselman et al., 2014a).

Empirical therapies with analgesics and hormone medicines can be begun before a diagnosis is obtained for endometriosis-related discomfort. Nonetheless, the existence or absence of endometriosis is not necessarily predicted by the response to hormone treatment. If women are unhappy with their therapy or are still experiencing symptoms, a diagnostic laparoscopy can be used to identify (and perhaps cure) or rule out the condition (Dunselman et al., 2014b). Women with endometriosis should ideally get care from a multidisciplinary team.

Cystectomy, rather than drainage or coagulation, is indicated for OE because it reduces endometriosis-related discomfort (Hart et al., 2008). Furthermore, cystectomy is favoured to carbon dioxide laser vaporisation since the recurrence rate is lower after cystectomy (Carmona et al., 2011), and women may rest certain that cystectomy does not impair ovarian reserve (Hart et al., 2008).

CONCLUSION:

In women of reproductive age, endometriosis must be included in the differential diagnosis of painful pelvis not associated with infertility.

REFERENCES:

1. ADAMSON, G. D., KENNEDY, S. & HUMMELSHOJ, L. 2010. Creating solutions in endometriosis: global collaboration through the World Endometriosis Research Foundation. J Endometriosis, 2, 3-6.
2. BIJLANI, P. D., SUMAN & SONAWARE, P. 2012. Current Practice in Obstetrics and Gynaecology-3 Endometriosis. Edited by Pankaj Desai & Purvi Patel, India: JAYPEE BROTHERS MEDICAL PUBLISHERS PVT LTD, volume 3, chapter 1, page 4.
3. BROSENS, I., PUTTEMANS, P., CAMPO, R., GORDTS, S. & KINKEL, K. 2004. Diagnosis of endometriosis: pelvic endoscopy and imaging techniques. Best Practice & Research Clinical Obstetrics & Gynaecology, 18, 285-303.
4. BULUN, S. E., UTSUNOMIYA, H., LIN, Z., YIN, P., CHENG, Y.-H., PAVONE, M. E., TOKUNAGA, H., TRUKHACHEVA, E., ATTAR, E. & GURATES, B. 2009. Steroidogenic factor-1 and endometriosis. Molecular and cellular endocrinology, 300, 104-108.
5. CARMONA, F., MARTÍNEZ-ZAMORA, M. A., RABANAL, A., MARTÍNEZROMÁN, S. & BALASCH, J. 2011. Ovarian cystectomy versus laser vaporization in the treatment of ovarian endometriomas: a randomized clinical trial with a five-year follow-up. Fertility and sterility, 96, 251-254.
6. DUNSELMAN, G., VERMEULEN, N., BECKER, C., CALHAZ-JORGE, C., D'HOOGHE, T., DE BIE, B., HEIKINHEIMO, O., HORNE, A., KIESEL, L. & NAP, A. 2014a. ESHRE guideline: management of women with endometriosis [Online]. Available:

https://academic.oup.com/humrep/article/29/3/400/707776
7. DUNSELMAN, G., VERMEULEN, N., BECKER, C., CALHAZ-JORGE, C., D'HOOGHE, T., DE BIE, B., HEIKINHEIMO, O., HORNE, A., KIESEL, L. & NAP, A. 2014b. ESHRE guideline: management of women with endometriosis [Online].
8. GIUDICE, L. C. 2010. CLINICAL PRACTICE: Endometriosis. The New England journal of medicine, 362, 2389-2398.
9. GYLFASON, J. T., KRISTJANSSON, K. A., SVERRISDOTTIR, G., JONSDOTTIR, K., RAFNSSON, V. & GEIRSSON, R. T. 2010. Pelvic endometriosis diagnosed in an entire nation over 20 years. American journal of epidemiology, 172, 237-243.
10. HART, R. J., HICKEY, M., MAOURIS, P. & BUCKETT, W. 2008. Excisional surgery versus ablative surgery for ovarian endometriomata. Cochrane Database Systematic Reviews 2, CD004992.
11. HINO, A., ADACHI, H., TOYOMASU, K., YOSHIDA, N., ENOMOTO, M., HIRATSUKA, A., HIRAI, Y., SATOH, A. & IMAIZUMI, T. 2004. Very long chain N-3 fatty acids intake and carotid atherosclerosis: an epidemiological study evaluated by ultrasonography. Atherosclerosis, 176, 145-149.
12. KENNEDY, S., BERGQVIST, A., CHAPRON, C., D'HOOGHE, T., DUNSELMAN, G., GREB, R., HUMMELSHOJ, L., PRENTICE, A. & SARIDOGAN, E. 2005. ESHRE guideline for the diagnosis and treatment of endometriosis. Human reproduction, 20, 2698-2704.
13. MACER, M. L. & TAYLOR, H. S. 2012. Endometriosis and infertility: a review of the pathogenesis and treatment of endometriosis-associated infertility. Obstetrics and gynecology clinics of North America, 39, 535-549.
14. MEULEMAN, C., VANDENABEELE, B., FIEUWS, S., SPIESSENS, C., TIMMERMAN, D. & D'HOOGHE, T. 2009. High prevalence of endometriosis in infertile women with normal ovulation and normospermic partners. Fertility and sterility, 92, 68-74.
15. OZKAN, S., MURK, W. & ARICI, A. 2008. Endometriosis and infertility: epidemiology and evidence-based treatments. Annals of the New York Academy of Sciences, 1127, 92-100.
16. SCHENKEN, R. 1996. Treatment of human infertility: the special case of endometriosis. Reproductive endocrinology, surgery and technology. Philadelphia, PA: Lippincott-Raven, 2122-39.
17. SCHULTES, G. 1999. Classification of endometriosis. Wiener medizinische Wochenschrift (1946), 149, 361-365.
18. SIMOENS, S., DUNSELMAN, G., DIRKSEN, C., HUMMELSHOJ, L., BOKOR, A., BRANDES, I., BRODSZKY, V., CANIS, M., COLOMBO, G. L. & DELEIRE, T. 2012. The burden of endometriosis: costs and quality of life of women with endometriosis and treated in referral centres. Human Reproduction, 27, 1292-1299.
19. SIMOENS, S., DUNSELMAN, G., DIRKSEN, C., HUMMELSHOJ, L., BOKOR, A., BRANDES, I., BRODSZKY, V., CANIS, M., COLOMBO, G. L. & DELEIRE, T. 2012. The burden of endometriosis: costs and quality of life of women with endometriosis and treated in referral centres. Human Reproduction, 27, 1292-1299.
20. SIMOENS, S., HUMMELSHOJ, L. & D'HOOGHE, T. 2007. Endometriosis: cost estimates and methodological perspective. Human reproduction update, 13, 395-404.
21. SIMPSON, J. L. & BISCHOFF, F. Z. 2002. Heritability and molecular genetic studies of endometriosis. Annals of the New York Academy of Sciences, 955, 239-251.
22. TRELOAR, S., HADFIELD, R., MONTGOMERY, G., LAMBERT, A., WICKS, J., BARLOW, D. H., T O'CONNOR, D., KENNEDY, S. & GROUP, I. E. S. 2002. The International Endogene Study: a collection of families for genetic research in endometriosis. Fertility and sterility, 78, 679-685.
23. VERCELLINI, P., VIGANO, P., SOMIGLIANA, E. & FEDELE, L. 2014. Endometriosis: pathogenesis and treatment. Nat Rev Endocrinol, 10, 261-275.
24. VITONIS, A. F., VINCENT, K., RAHMIOGLU, N., FASSBENDER, A., LOUIS, G. M. B., HUMMELSHOJ, L., GIUDICE, L. C., STRATTON, P., ADAMSON, G. D. & BECKER, C. M. 2014. World Endometriosis Research Foundation Endometriosis Phenome and biobanking harmonization project: II. Clinical and covariate phenotype data collection in endometriosis research. Fertility and sterility, 102, 1223-1232.
25. ZONDERVAN, K. T., YUDKIN, P. L., VESSEY, M. P., DAWES, M. G., BARLOW, D. H. & KENNEDY, S. H. 1999. Prevalence and incidence of chronic pelvic pain in primary care: evidence from a national general practice database. BJOG: An International Journal of Obstetrics & Gynaecology, 106, 1149-1155.