

Study on Cesarean Scar Endometriosis: An Uncommon Surgical Complication

K.S. Ramalingam¹, Anita Rajan², Heber Anandan³

ABSTRACT

Introduction: Endometriosis is a common and distressing gynecological problem in women of reproductive age group. It shows as red, petechial lesions, usually multiple, on the peritoneal surface of the uterus, ovaries, and fallopian Tubes. Study aimed to evaluate endometrioma located at cesarean scatrix.

Material and Methods: We report four such cases Medical treatment most often is not helpful. They are under follow up for the past three years and there is always a chance of recurrence.

Results: All patients had a painful mass positioned at abdominal scars with history of cesarean section. Of the four cases two are from LSCS scars and the third one is the puerperal sterilization scar and all three presented with swellings but the fourth one over the LSCS scar was without any palpable swelling. All four cases were operated and the histopathology confirmed them as scar endometriosis.

Conclusion: The general surgeon is infrequently involved in management of scar endometriosis and the lack of awareness may lead to errors in preoperative diagnosis and Ultrasound CT MRI and FNAC may help to clinch the diagnosis. Look for recurrences and malignant transformation.

Keywords: Endometriosis, Granuloma, Hemosiderin, Scar

INTRODUCTION

Endometriosis is a frequent and distressing health problem of women. Its correct prevalence is unknown because it can be diagnosed only later surgery either open or laparoscopy, but it is expected to be present in 3-10% of women in the reproductive age group, and 25-35% of infertile women.¹⁻³ It is seen in 1-2% of women undergoing sterilization or sterilization reversal, in 10% of hysterectomy surgeries, in 16-31% of laparoscopies, and in 53% of adolescents with pelvic pain severe enough to warrant surgical evaluation. Endometriosis is the most general single gynecologic diagnosis liable for the hospitalization of women aged 15-44, accounting for over 6% of patients. Endometriosis is characterized by the appearance of functioning endometrial tissue outside the uterine cavity.^{4,5} This disease is one of the most common gynecologic disorders in reproductive age women. It occurs in the pelvic cavity. But the extrapelvic area has been defined (such as extremities, central nervous system, lungs, pleurae, liver, umbilicus, pericardium, urinary tract, intestines, and surgical scar tissue). Scar endometriosis is a unique disease and determined as the presence of endometriotic lesions on the abdominal (such as cesarean section and hysterectomy) or vaginal (episiotomy) excision line. It's hard to diagnose due to the extreme variability in

presentation.^{6,7} The signs are nonspecific, typically involving pain, swelling at the incision site at the time of menstruation. Excision and histopathologic examination are essential for diagnosis.

Study aimed to evaluate endometrioma located at cesarean scatrix.

MATERIAL AND METHODS

This was a small case series and retrospective study on patients with abdominal wall C/S endometrioma. In this study, we presented clinical and laboratory findings of six consecutive patients with scar endometrioma.

RESULTS

Quite often the General Surgeon is encountered with a case of scar endometriosis. Here four such cases operated are reported. The diagnostic problem is always there and because of the rare presentation they are reported. The main suspicion comes with the history of pain being related to menstrual periods. Otherwise we usually take it as a case of proline granuloma the swelling being typically in the scar area. Experienced sonologist is able to suggest the preoperative diagnosis and the FNAC may or may not be helpful and in the absence of a swelling and pain being the only predominant symptom MRI can help in identifying the lesion. Of the four cases two are from LSCS scars and the third one is the puerperal sterilization scar and all three presented with swellings but the fourth one over the LSCS scar was without any palpable swelling and MRI scan helped. All four cases were operated and the histopathology confirmed them as scar endometriosis. All lesions were found infiltrating into the muscular planes and the dissection involved some damage to the muscles which needed reconstruction. The post operative periods were uneventful. All of them reported after a period of three to four years after the primary surgery.

DISCUSSION

The common clinical history is a painful nodule in a parous woman with a history of gynecological or obstetrical

¹Consultant, Department of Surgery, Sacred Heart Hospital,

²Consultant, Department of Surgery, Jothi Nursing Home, Tuticorin,

³Senior Clinical Scientist, Department of Clinical Research, Dr. Agarwal's Healthcare Limited, Tamilnadu, India

Corresponding author: Dr K S Ramalingam, 6, East Main Street, Chidambaranagar, Tuticorin, Tamilnadu, India

How to cite this article: K.S. Ramalingam, Anita Rajan, Heber Anandan. Study on cesarean scar endometriosis: an uncommon surgical complication. International Journal of Contemporary Medical Research 2017;4(9):1849-1850.

S. No	Patient Age	Recurrent disease	Years after C/S	Interval to symptoms onset, years	Pain type	Weight of lesion (g)	Size (cm)	Initial diagnosis
1	35	On and off	10	5	mild	35 mg	2x2	Scar endometriosis
2	32	On and off	8	3	mild	46mg	3x2	Prolene granuloma
3	38	On and off	12	6	mild	37mg	2x1	Granuloma
4	30	On and off	8	5	mild	56mg	3x2	Infected cyst

Table-1: Patients who were diagnosed with scar endometrioma in caesarean sections site

surgery. The severity of pain and size of nodule vary with the menstrual cycle. The development of intrapelvic endometriosis is due to retrograde menstruation, maturation of extrauterine primordial cell of remnants of embryogenesis and hematologic or lymphatic spread of endometrial cells.^{8,9} Extrapelvic endometriosis in the lung, the skin, and extremities are associated with surgery involving the uterus and are believed to be the result of hematogenous or lymphatic spread of endometrial tissue. Scar endometriosis is believed to be the direct inoculation of the abdominal tissue with endometrial cells, which subsequently are stimulated by estrogen to produce endometriomas.¹⁰ Its occurrence is well documented in incisions of any type like epicyotomy, ectopic pregnancy, laparoscopy, tubal ligation and caesarean section. Time interval has varied from 3 months to 10 years. Diagnosis is difficult and often misdiagnosed as stitch granuloma, incisional hernia, inguinal hernia, desmoid tumour, sarcoma, lymphoma primary or metastatic cancer.^{11,12} A high index of suspicion, when a woman with a history of pelvic surgery comes with a nodule or lump always helps. History of variation of pain with menstrual periods also helps. Imaging techniques like ultrasound, CT and MRI helps. Medical management with hormones and other measures are not always helpful and surgical excision leads to cure and of course always look for recurrence. Malignant changes were reported 21.3% extragonadal pelvic endometriosis and 4% in scar endometriosis.¹³⁻¹⁷

CONCLUSION

The general surgeon is infrequently involved in management of scar endometriosis and the lack of awareness may lead to errors in preoperative diagnosis and Ultrasound CT MRI and FNAC may help to clinch the diagnosis. Look for recurrences and malignant transformation.

REFERENCES

- Wheeler JM. Epidemiology and prevalence of endometriosis. *Infertil Reprod Med Clin North Am* 1992;3:545-8.
- Jubanyik KJ, Comite F. Extrapelvic endometriosis. *Obstet Gynecol Clin North Am* 1997;24:411-40.
- Steck WD, Helwig EB. Cutaneous endometriosis. *Clin Obstet Gynecol* 1966;9:373-83.
- Miraglia S, Mishell DR, Ballard CA. Incisional endometriomas after caesarean section, a case series. *J Reprod Med Obstet Gynaecol* 2007;52:630-4.
- Patterson GK, Winburn GB. Abdominal wall endometriomas: Report of eight cases. *Am J Surg* 1999;65:36-9.
- Chatterjee SK. Scar endometriosis: A clinico-pathological study of 17 cases. *J Obstet Gynaecol* 1980;56:81-4.
- Koger KE, Shatney CH, Hodge K, McClenathan JH. Surgical scar endometrioma. *Surg Gynecol Obstet* 1993;177:243-6.
- Wolf Y, Haddad R, Werbin N, Skornick Y, Kaplan O. Endometriosis in abdominal scars: A diagnostic pitfall. *Am Surg* 1996;62:1042-4.
- Aydin O. Scar endometriosis - A gynaecologic pathology often presented to the general surgeon rather than the gynaecologist: Report of two cases. *Langenbecks Arch Surg* 2007;392:105-9.
- Gunes M, Kayikcioglu F, Ozturkoglu E, Haberal A. Incisional endometriosis after cesarean section, episiotomy and other gynecologic procedures. *J Obstet Gynaecol Res* 2005;31:471-5.
- Scott RB, Te Linde RW. Clinical external endometriosis; probable viability of menstrually shed fragments of endometrium. *Obstet Gynecol* 1954;4:502-10.
- de Oliveira MA, de Leon AC, Freire EC, de Oliveira HC. Risk factors for abdominal scar endometriosis after obstetric hysterotomies: A case-control study. *Acta Obstet Gynecol Scand* 2007;86:73-80.
- Ideyi SC, Schein M, Niazi M, Gerst PH. Spontaneous endometriosis of the abdominal wall. *Dig Surg* 2003;20:246-8.
- Oner A, Karakucuk S, Serin S. Nasolacrimal endometriosis. A case report. *Ophthalmic Res* 2006;38:313-4.
- Roncoroni L, Costi R, Violi V, Nunziata R. Endometriosis on laparotomy scar. A three-case report. *Arch Gynecol Obstet* 2001;265:165-7.
- Seltzer VL, Benjamin F, Deutsch S. Perimenopausal bleeding patterns and pathologic findings. *J Am Med Womens Assoc* 1990;45:132-4.
- Blanco RG, Parithivel VS, Shah AK, Gumbs MA, Scheinz M, Gerst PH. Abdominal wall endometriomas. *Am J Surg* 2003;185:596-8.

Source of Support: Nil; **Conflict of Interest:** None

Submitted: 18-08-2017; **Accepted:** 17-09-2017; **Published:** 28-09-2017