# Splenectomy and removal of bilateral huge chocolate cyst with ovarian preservation

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**Case report:** An unusual discovery of exceptionally large, bilateral chocolate (endometriotic) cysts of ovaries amidst dense pelvic adhesion and thick peritoneal collection due to occasional spill from the cyst in a young adolescent, encountered during spleenectomy performed for idiopathic thrombocytopenia is reported.

Key words: Chocolate cysts, ovarian cyst, spleenectomy, thrombocytopaenia

## Introduction

Bilateral chocolate cyst of ovary in a young girl can be a matter of annoyance as this gives rise to pelvic pain and infertility. Often chocolate cyst of ovaries in young women comes to one's notice at acute emergency when ever there is torsion or rupture. But, such huge bilateral chocolate ovarian cysts having accidental detection at spleenectomy for associated thrombocytopenia, in young adolescent has rarely been seen which is represented herewith.

## Case

A young girl 14 years of age needing frequent blood transfusion was admitted in the Surgical Department with the history of recurrent bleeding from gum, nose including uterus, latter in the form of menorrhagia, which is bleeding over extended period during the menstrual cycle. She was a diagnosed to be a case of thrombocytopenia and had been receiving medical treatments like prednisolone, to stop her bleed from various other sites which was not very helpful. Hence spleenectomy was decided to relieve her completely from thrombocytopaenia. The preoperative investigations showed marked reduction in platelet number; hence fresh frozen plasma and fresh blood were kept ready.

Spleenectomy was done in usual manner. But while approaching for the ovary which supposedly had been opined as simple ovarian cyst by an ultrasound scan was sought with difficulty. Each ovary were enlarged almost to

about 20 x12 and 15x 10 cm, containing tarry blood within the cyst, the cyst probably having had leaked frequently at times provoking dense peritoneal adhesion, such that the entry to the peritoneum was guarded. A little amount of ovarian tissue preservation could be accomplished during cystectomy with unavoidable rupture of the ovary intra operatively (Fig. 1). However the other enlarged ovary without any normal ovarian tissue demanded complete removal that could not be salvaged (Fig. 2). The abdomen was closed leaving a drain in situ.

**Fig. 1:** Huge ovarian chocolate cyst containing tarry blood.

Within the next 7 hours post operatively more than 800cc blood collection was drained through the drainage tube for which she received 4 units of fresh frozen plasma and platelet transfusion. After this the drain tube ceased to show drainage of blood. She had uneventful recovery. And also reported to experience menstruation once and thereafter was put on progesterone therapy for endometriosis.

**Fig. 2:** Spleenectomy specimen along with bilateral chocolatecyst of ovary.

#### Discussion

Its sad to bump into such a case with dual problems; one of hematology indicative of blood disorder and other with tumor, at such young age succumbed with bilateral ovarian pathology which came as a surprise as we had anticipated a simple ovarian cyst in view of her USG report. However, a little amount of ovarian tissue that was affordable to be preserved was able to bring about menstruation. We also realized that, one must always take chance and leave behind normal ovarian tissue as much as possible in such circumstances, in view that even the smallest part of ovarian tissue left behind might evoke menstruation. And the uterus must be left undisturbed for assisted reproductive technology.

Clinical judgments of bilateral ovarian endometrioma were difficult in this case at the outset, in the first place because, internal pelvic examination was denied by this young girl. Even if this had been done with consent, tenderness involved during the process as visualized retrospectively could have given a false picture. Menorrhagia in this case must have been partly due to ovarian endometriosis which was only blamed to low platelet.

Bilateral ovarian endometrioma were frequently seen in 23 of the 73 women exposed for laparoscopic surgery, with record of a cyst diameter up to 25cm. Huge chocolate have been well acquainted with Japanese authors too, however

finding of bilateral ovarian involvement with huge endometrioma in a same individual like this is rare.<sup>2</sup> There are detailed studies related to ovarian endometriosis in the adolescents.<sup>3, 4</sup> And unusual reports showing recurrence and malignant transformation are scary. <sup>1,5</sup>

With this we end up by saying that, it is important to make thorough examination of each ovary for detection of any normal ovarian tissue that can be left behind as the entire reproductive future lies in ovarian preservation as in this case. And whenever confronted with bilateral chocolate cyst in a young adolescent, ovaries or ovarian must be preserved in part or whole, the one whichever is permissible. Often enucleation and aspirations of the smaller chocolate cysts laparoscopically have resulted in successful conception and pregnancy continuation.

### References

- Jones KD, Sutton CJ. Recurrence of chocolate cysts after laparoscopic ablation. J Am Assoc Gynecol Laparosc. 2002;9(3):315-20.
- 2. Marchevsky AM, Kaneko M. Bilateral ovarian endometriosis associated with carcinosarcoma of the right ovary and endometrioid carcinoma of the left ovary. Am J Clin Pathol. 1978; **70**(4):709-12.
- 3. Ishikawa H, Taga M, Haruki A, Shirasu K, Minaguchi H, Hara M.
  - Huge ovarian endometrial cyst: a case report. Eur J Obstet Gynecol Reprod Biol. 1997; **74(2):** 215-7.
- 4. Huffman JW. Endometriosis in young teen-age girls. Pediatr Ann. 1981; **10(12):** 44-9.
- 5. Motashaw ND. Endometriosis in young girls. Contrib Gynecol Obstet. 1987; **16:**22-7.