





of patients [3]. This lesion is commonly seen in young women of childbearing age, and rarely in very young adolescents. Mature cystic teratoma rarely grows more than 10 cm [4]. It can be diagnosed by ultrasound based on its specific features [5]. CT scan may be reserved to visualize the nature of large size tumors, when suspicion of malignancy is present. Mature cystic teratoma is usually asymptomatic and rarely causes symptoms unless it undergoes torsion or pressure symptoms resulting from increasing size of the tumor. The tumor is usually managed by cystectomy or oophorectomy, performed laparoscopically or via laparotomy, depending on the patients age, fertility, cosmetic issues, ovarian tissue reserved and if one or both ovaries affected [6,7]. The preservation of ovarian tissue is highly important in patients with bilateral pathology. The percentage for malignant transformation is 0.2-2% [8]. Mature cystic teratoma at 13 years of age in the patient described, is considered to be rare, especially bilaterally with tumor size >10 cm in each ovary. The lowest age reported was 9 years old in two patients [9,10]. One of them had a unilateral mass and the other was bilateral, with tumor size <10 cm in both cases. Mature cystic teratoma with synchronous immature teratoma in the opposite ovary in a 9-years-old girl has been reported in the literature [10]. Multiple, bilateral ovarian dermoid cyst <10 cm have been reported in the past [11-13]. Bilateral mature cystic teratoma >10 cm in a 35-years old patient has been reported by El-Agwany [14]. CT scan was of great value in the diagnosis of our case because of the size of the cysts and had to be managed by laparotomy. Recurrence may occur 1-15 years after operation [15]. Long term recurrence rate of 4.2% after surgical excision of mature cystic teratoma was reported in one study [16]. Young age, bilaterally, and large cyst size >8 cm were shown to be significant predictive factors. When a patient had all these three factors, the recurrence rate was 21.0% [16]. Our patient was followed up with ultrasound periodically and advised to have further checks in the future, considering her age and bilateral tumours more than 10 cm in size.

## Conclusion and Recommendations

This case report is a rare presentation of mature cystic teratoma in adolescence which is a definite entity in the differential diagnoses of abdominal pain with pelvic-abdominal mass in young females. Long term follow up of this patient with significant predictive factors is advised due to higher incidence of recurrence in the future.

## Acknowledgement

To the patients who provided us, signed permission to report this case for publications.

## References

1. Sucly RE, Young RH, Clement PB (1998) Tumor of the ovary, maldeveloped gonads, fallopian tube and broad ligament. *Atlas of tumor pathology*. Third series, fascicle 23. Washington, DC: Armed Forces Institute of Pathology.
2. Peterson WF, Prevost EC, Edmunds FT, Hundley JM Jr, Morris FK (1955) Benign cystic teratoma of the ovary: a clinico-statistical study of 1007 cases with review of the literature. *Am J Obstet Gynecol* 70: 368-82.
3. Einarson JI, Edwards CL, Zurawin RK (2004) Immature ovarian teratoma in adolescence: A case report and review of literature. *J Pediatr Adolesc Gynecol* 17: 187-9.
4. Comerici JT Jr, Licciardi F, Breghe PA, Gregorgi C, Breen JL (1994) Mature Cystic Teratoma: a clinicopathologic evaluation of 517 cases and review of literature. *Obstet Gynecol* 84: 22-28.
5. Patel MD, Feldstein VA, Lipson SD, Chen DC, Filly RA (1998) Cystic teratoma of the ovary: diagnostic value of sonography. *AJR Am J Roentgenol* 17: 1061-1065.
6. Zanette G, Ferrari L, Mignini-Renzini M, Vignali M, Fadini R (1999) Laparoscopic excision of ovarian dermoid cyst with controlled intraoperative spillage. Safety and effectiveness. *J Reprod Med* 44: 815-820.
7. Silva PD, Ripple J (1996) Outpatient minilaparotomy ovarian cystectomy for benign teratoma in teenagers. *J Pediatr Surg* 31: 1383-1386.
8. Singh P, Yordan EL, Wilbanks GD, Miller AW, Wee A (1988) Malignancy associated with benign cystic teratomas of the ovary. *Singapore Med J* 29: 30-34.
9. Iwata A, Matsubara K, Umemoto Y, Hashimoto K, Fukaya T (2009) Spontaneous rupture of benign ovarian cystic teratoma in a premenarcheal girl. *J Pediatr Adolesc Gynecol* 22: e121-123.
10. Sai Prasad BV, Md K Faheem N, Indrani G, Vittal Mohan P, Sreedhar Babu KV, et al. (2014) Mature cystic teratoma with synchronous immature teratoma of opposite ovary in a nine year old girl - a varied presentation of common tumor: A case report with review of literature 2: 75-80.
11. Pepe F, Lo Monaco S, Rapisarda F, Raciti G, Genovese C, et al. (2014) An unusual case of multiple and bilateral ovarian dermoid cysts. *Case report. G Chir* 35: 75-77.
12. Sinha R, Sethi S, Mahajan C, Bindra V (2010) Multiple and bilateral dermoids: a case report. *J Minim Invasive Gynecol* 17: 235-238.
13. Bourmas N, Varras M, Kassanos D, Chrelias Ch, Tzaida O, et al. (2004) Multiple dermoid cysts within the same ovary: our experience of a rare case with review of the literature. *Clin Exp Obstet Gynecol* 31: 305-308.
14. El-agwany A, Moneim AA (2015) Multiple bilateral huge synchronous ovarian mature cystic teratomas: A rarely encountered condition in practice. *Egyptian J Radiol Nuclear Med* 46: 15-197.
15. Alanbay I, Coksuer H, Ercan M, Karashin E, Keskin U (2011) Multiple recurrent cystic teratoma of the same ovary: A case report and literature review. *Med J Kocatepe* 12: 8-12.
16. Harda M, Osuga Y, Fujimoto A, Fujimoto A, Fujii T, et al. (2013) Predictive factors for recurrence of ovarian mature cystic teratoma after surgical excisions. *Eur J Obstet Gynecol Reprod Biol* 171: 325-328.