

FRI-ONLINE-1-MCDA-11

GIANT CYSTIC TERATOMA OF THE MESORECTUM IN A MALE PATIENT. CASE REPORT ¹¹

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Abstract: Mature cystic teratoma (MCT) or dermoid cyst is a benign tumor originating from germ cells. Usually it arises from the ovary, but it can occur in males too, most often in the testis. In males oelvis teratomas are extremely rare. They usually present with symptoms related to mass effect in the pelvis.

We present a case of giant MCT in a 52 years old patient. The patient presented with mild lower abdominal pain and chronic constipation. On rectal digital examination a large, soft tumor mass can palpated that is not inside the rectal lumen. CT and MRI show a large cystic tumor in the mesorectum with compression of the rectum and deformity of the pelvic walls. Open surgical enucleation was performed. A drain was left in place of the tumor in the mesorectum. Postoperative period was uneventful. Liquid diet was advanced on postoperative day 1. The drain was removed on postoperative day 3. Patient was discharged on postoperative day 5. Histology turned mature cystic teratoma as diagnosis. At 6 months postoperatively patient has no complications.

Giant MCT are unusually located in male pelvis, but few cases can occur. Surgical enucleation was feasible and safe in our case and there were no complications related to continence.

Keywords: Giant mature cystic teratoma, Mesorectum, Teratoma

JEL Codes: L10, L11

INTRODUCTION

Mature cystic teratomas (MCT) also called dermoid cysts, are benign tumors arising from germ cells. They consist of at least 2 out of the 3 germ layers. They are more frequent in females and originate from the ovaries. Presence of MCT in male patients is uncommon and is usually associated with the male reproductive organs such as testis and seminal vesicles.(Erden,A. et al., 2003, Gatcombe, HG. et al., 2004, Alhumayed, M., Liao, J. 2021) Pelvic localization of MCT is even rarer, however there are a number of cases reported, the first one from 1973. Pelvic MCTs usually present with mass effect on adjacent organs and can cause symptoms from urinary and reproductive systems, circulatory system and be the cause of constipation.(Alhumayed, M., Liao, J.,2021). Retrorectal localization has been described before, but is still extremely rare. When

¹¹ Докладът е представен на пленарната сесия на 28 октомври 2022 в секция МКДД с оригинално заглавие на български език: ГОЛЯМА КИСТИЧНА ТЕРАТОМА В МЕЗОРЕКТУМА ПРИ ПАЦИЕНТ ОТ МЪЖКИ ПОЛ-КЛИНИЧЕН СЛУЧАЙ

present, they cause displacement of the rectum and can even deform the pelvic walls. Diagnosis can be confirmed by CT scan or MRI (Rajiah, P., Sinha, R., Cuevas, C., Dubinsky, TJ., Bush, WH. Jr., Kolokythas, O.,2011).

EXPOSITIO

Case report

We present a case of MCT in a 52 years old male patient that was treated in our clinic. The patient complained of progressively worsening constipation that required the constant use of laxatives. Digital rectal examination found large, soft tumor mass, compressing the rectum and displacing it anteriorly. The tumor was no originating from the mucosa of the rectum. CT and MRI were the diagnostic modalities of choice in our case. The CT and MRI showed a giant tumor mass in the pelvis with maximal dimensions 14,2 x 12,6 x 16,7 cm. The tumor mass was compressing and even deforming the pelvis. The walls of the tumor were well defined without signs of infiltration or calcification, but a zone of keratin deposit could be noted. The contents of the cystic mass were homogenic on CT with density varying from 5 to 15 Hounsfield units, however on MRI they appeared heterogenic. A small area of dense adhesion could be noted towards the coccygeal bone. (fig.1-5) Open surgical removal of the tumor mass was undertaken. The patient was placed in modified lithotomy position on the operation table. A low midline laparotomy was used for approach. The mesorectum above the tumor was incised and wall was exposed. Using blunt and sharp dissection the wall was separated form the tissues of the mesorectum. When the lower part of the formation was reached and the pelvis became narrower, it was impossible to access the sone because of the tumor's size. A small incision was made and approximately half of the beige coloured, heterogenous contents was removed. The incision was sutured, to prevent spillage, and the mass was completely removed. After meticulous hemostasis, a tube drain was placed inside the resulting cavity. The laparotomy was closed using PDO Loop 0 running suture. The skin was closed using skin stapler. Liquid diet was advanced on postoperative day (POD) one. The drain was removed after 72 hours. The patient was discharged on POD 5. On POD 12 the skin staples were removed and on POD 20 the patient returned to normal life and work habits. Pathological evaluation concluded mature cystic teratoma. On follow up 6 months after surgery, the patient has no complaints and is satisfied with the results of the surgery. The patient reports no constipation requiring laxatives or incontinence.

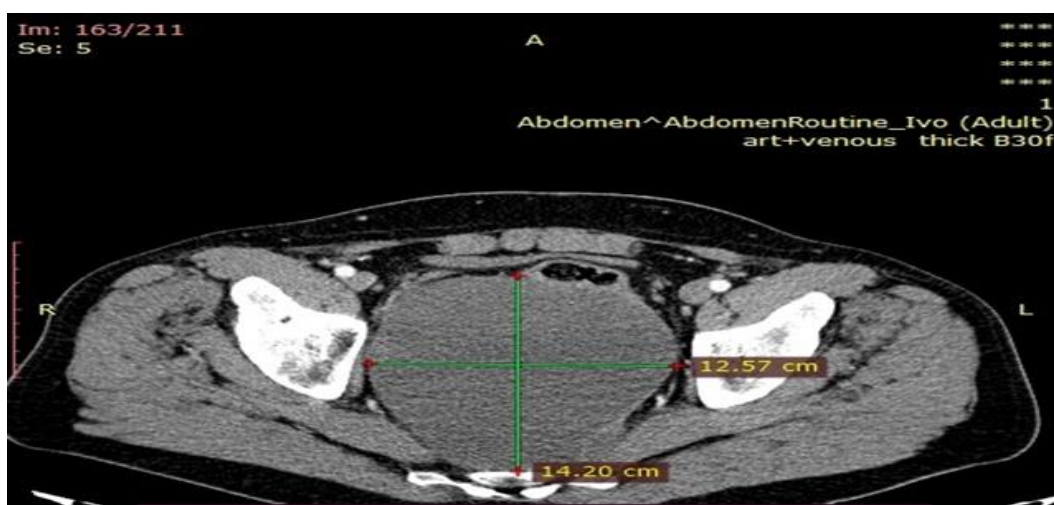


Figure 1. Axial image of the tumor on CT

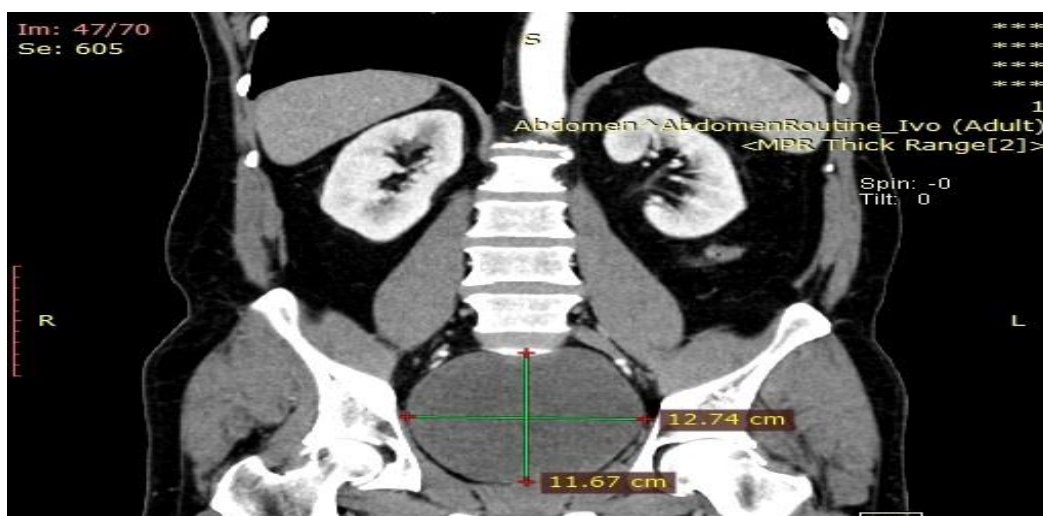


Figure 2. Coronal image of the tumor on CT



Figure 3. Sagittal image of the tumor on CT

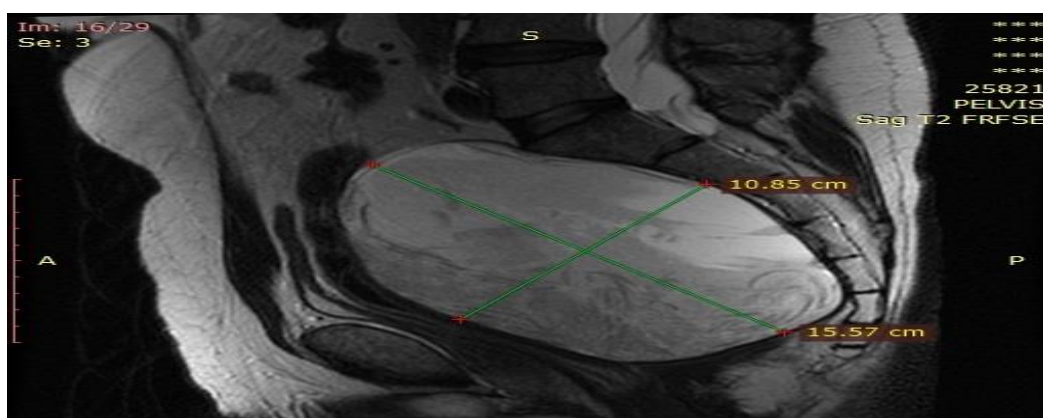


Figure 4. T2 weighted sagittal image of the tumor on MRI

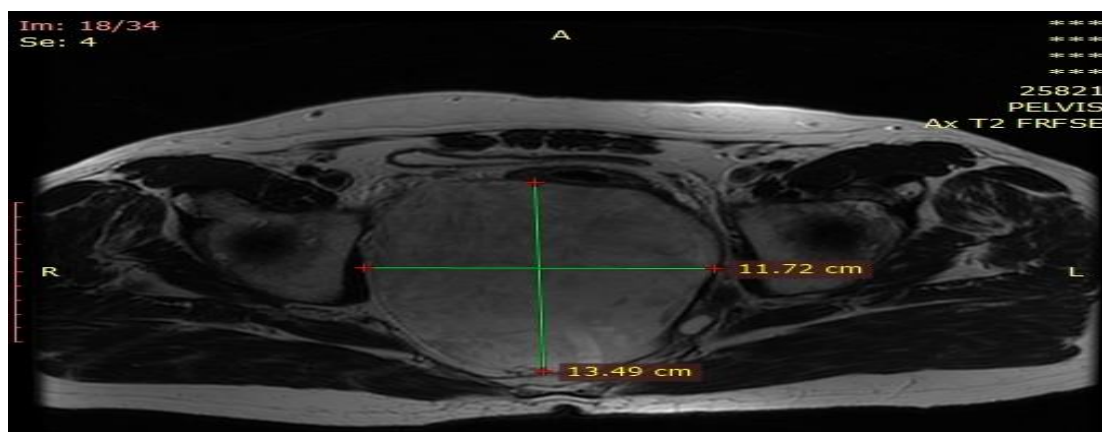


Figure 5. T2 weighted axial image of the tumor on MRI

Discussion

Originating from germ cells, MCTs are a rare entity in male pelvic tumor findings. Although they are benign tumors, in 0,2-2% of the cases they can be malignant. Furthermore, they cause mass effect in the pelvis with variety of symptoms. That being the case, surgical removal should always be undertaken when they are diagnosed. Proper preoperative evaluation of the tumor is important to plan an appropriate surgical approach, and to navigate during surgery. For this we used contrast enhanced CT and MRI of the pelvis. Laparoscopic excision is feasible and safe and can be utilised in smaller teratomas or retroperitoneal ones. In our case the teratoma was taking up almost all the space of the pelvis so laparoscopic approach was not possible. Even though open surgical approach was used, the patient recovered quickly. Early mobilisation and advance of liquid diet play important role in quick recovery after surgery.

CONCLUSION

Giant MCT are unusually located in male pelvis, but few cases can occur. Surgical enucleation was feasible and safe in our case and there were no complications related to continence

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