

A Rare Case of Intra Mesenteric Dermoid Cyst

Vikas Katiar¹, Kumar Vineet², Himanshu Singh³, Sanjay Tripathi⁴, Vikas Patel⁵

^{1, 2, 3, 4, 5} Department of General Surgery, GSVM Medical College & LLR Hospital, Kanpur, Uttar Pradesh, India.

INTRODUCTION

A dermoid cyst is a teratoma of a cystic nature which can occur wherever a teratoma can occur. Intra mesenteric dermoid cyst is rarest of rare case and even its incidence is not known. Here, we report a case of intra mesenteric dermoid cyst in 21 yr. old female patient who presented to us with complain of on & off mild pain in abdomen for last 2 years. Intra mesenteric dermoid cyst is a rare condition and when presented with symptoms, it should be operated upon for improving patient's overall wellbeing.

Dermoids belong to the group of congenital cystic tumours developing from an embryonic rest. Such tumours vary from those which contain only epidermal cells to those containing various dermal derivatives, such as glandular cells (sebaceous), and even hair and teeth. So, they vary from pure epidermoids to dermoids and then through the teratoid tumours to the teratomas. These tumours can arise wherever two ectodermal surfaces fuse together in the developing embryo when an ectodermal implant is retained deep in the surface.¹ Intra mesenteric dermoid is very rare and no previous case report regarding intra mesenteric dermoid was found.

PRESENTATION OF CASE

A 21-year-old unmarried female presented to us with a chief complaint of on & off mild pain in abdomen for last 2 years which has increased in intensity in last 2 months. Pain was present around umbilicus. There was no history of bowel and bladder disturbance, loss of appetite or weight. There were no menstrual irregularities. Patient's built was lean and thin. No icterus, pallor or lymphadenopathy was present. Patient's vitals were stable. On per abdomen examination a large lump was felt whose margins could not be delineated. Lump was found in right hypochondrium and lumbar region. Per rectal examination was normal.

Routine investigations were ordered and were within normal limit. Ultrasonography revealed a large well defined rounded solid lesion in right subhepatic region. Lesion mainly consisted of fat with some internal septations and calcifications. Further, computed tomography (CT) scan of abdomen was done, and it suggested a well-defined, well marginated, lobulated lesion in right side of abdomen displacing inferior vena cava (IVC) posteriorly and bowel loops towards left side and abutting right renal vessels. Features were suggestive of intraperitoneal dermoid cyst. (Figure 1 and 2)

Corresponding Author:

Dr. Kumar Vineet,

Resident,

Department of General Surgery,

LLR Hospital, Kanpur,

Uttar Pradesh, India.

E-mail: likho2vineet@gmail.com

DOI: 10.18410/jebmh/2021/53

How to Cite This Article:

Katiar V, Vineet K, Singh H, et al. A rare case of intra mesenteric dermoid cyst. J Evid Based Med Healthc 2021;8(05):275-277. DOI: 10.18410/jebmh/2021/53

Submission 19-10-2020,

Peer Review 26-10-2020,

Acceptance 19-12-2020,

Published 01-02-2021.

Copyright © 2021 Vikas Katiar et al. This is an open access article distributed under Creative Commons Attribution License [Attribution 4.0 International (CC BY 4.0)]

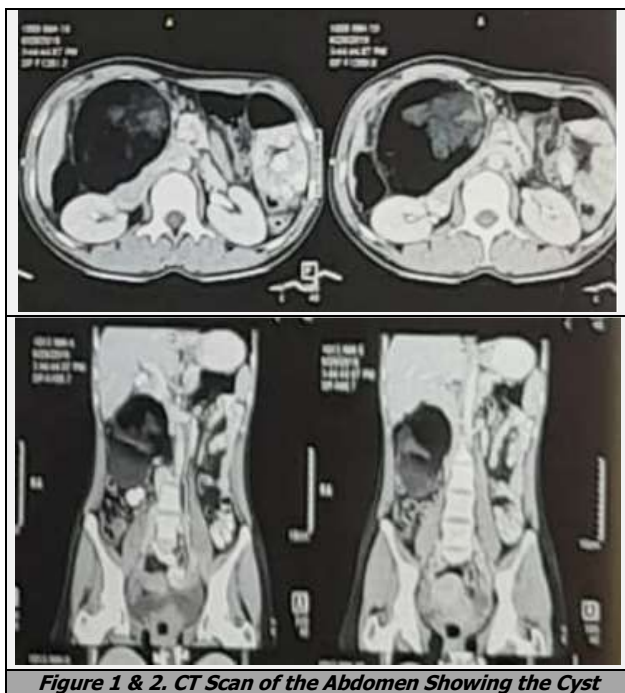
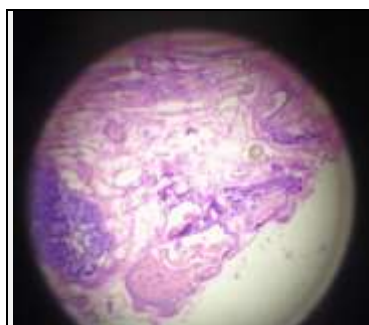


Figure 1 & 2. CT Scan of the Abdomen Showing the Cyst

Usually, lump / mass in right side of abdomen in a young female indicates towards appendicular lump after appendicitis or mass originating from ovary. Since, patient's complaint was for last 2 years, it ruled out appendicular lump after appendicitis and patient's normal general condition was ruling out any malignant mass. Any lump / mass in abdomen in the above age group was rare, so CT scan was utilised to reach diagnosis.

PATHOLOGICAL DISCUSSION

Gross specimen consists of a globular tissue piece measuring 15 cm * 11 cm * 9 cm with greyish white outer surface and fibro fatty attachment. On cut section, there was large amount of fat with strands of hair. Microscopic examination showed fibrocollagenous cyst lining stroma with proliferation of blood capillaries and multiple multinucleated giant cells. Fragments of hair was also present. (Figure 3)



**Figure 3.
Histopathological
Slide of Dermoid Cyst**

DISCUSSION OF MANAGEMENT

Since, lump was compressing IVC and displacing bowel loops, it was decided to operate it. Small, asymptomatic

intra-abdominal dermoid cysts can be observed if it is not malignant. A midline incision was taken and margin of cyst was inspected. All the vessels going in and out of it were taken into consideration. Wide local excision of the cyst was done taking 5 cm normal mesenteric tissue margin with it. (Figure 4) Care was taken to tie all the feeding vessels coming from mesentery. Meticulous haemostasis with no compromise of bowel blood supply was achieved. Outer surface of cyst was quite vascular and visible large vessels were going in and out of it from its base. (Figure 5) There were surrounding large mesenteric vessels which were to be saved. Cyst was not punctured intra abdominally, otherwise spillage of contents could cause potential chemical peritonitis, adhesion, abscess and enterocutaneous fistula formation.¹ Mesentery was closed and both adnexa were observed and were found to be normal. Patient was allowed oral intake in the evening of operation and was discharged in satisfactory conditions.



**Figure 4.
Excision of
Dermoid Cyst**



**Figure 5.
Excised Intra
Mesenteric
Dermoid Cyst**

Dermoids are a group of congenital cystic tumours. They arise from totipotent germ cells usually in ovary.² These tumours vary in their gross presentation from those which contain only epidermal cells to those containing various dermal derivatives, such as glandular cells (sebaceous), and even hair and teeth.³ An intra-mesenteric dermoid cyst is a rare entity and can be kept in mind as differential diagnosis of intra-abdominal lumps which appears to be cystic. No previous reporting regarding intra mesenteric dermoid was found.

Financial or other competing interests: None.

Disclosure forms provided by the authors are available with the full text of this article at jebmh.com.

REFERENCES

- [1] Shamshirsaz AA, Shamshirsaz AA, Vibhakar JL, et al. Laparoscopic management of chemical peritonitis caused by dermoid cyst spillage. J Society of Laparoscopic and Robotic Surgeons 2011;15(3):403-405.
- [2] O'Neill KE, Cooper AR. The approach to ovarian dermoids in adolescents and young women. J Pediatr Adolesc Gynecol 2011;24(3):176-180.
- [3] Roth M, Hanák L, Schröder R. Intramedullary dermoid. J Neurol Neurosurg Psychiatry 1966;29(3):262-264.