

## Atypical Praevia Obstacle: Cystic Lymphangioma Intra-Abdominal About A Case

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### Abstract

### Case Report

Cystic lymphangioma is an uncommon intra-abdominal lesion that is an occasional incidental finding. We report herein the case of a 27-year-old woman with a 3-year history of abdominal pain without having established the diagnosis. She was admitted with a diagnosis of delivery. Caesarean section was indicated for praevia obstacle. Surgical exploration found a huge cyst between the uterus and the bladder. The dissection of the cyst was difficult with decision to achieve it in a second time. A resection of the mass, was performed with a complete resection. The pathologic examination revealed a cystic lymphangioma. The postoperative course was uneventful. His discovery avoided a poor prognosis of childbirth.

**Keywords:** Abdominal cyst; Cystic lymphangioma, praevia obstacle.

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## INTRODUCTION

Abdominal lymphangioma is a rare tumour usually classified with mesenteric and retroperitoneal cysts. Obstacle praevia by a cystic lymphangioma is very rare. Retroperitoneal cystic lymphangiomas can present as a soft, slowly growing, and painless mass. The mass may be an incidental finding during the evaluation of an unrelated complaint in our case the diagnosis of lymphangioma was acquired following a hurdle praevia. Ultrasonography and computed tomographic scans are highly sensitive in the diagnosis of abdominal cystic lymphangioma. The treatment of choice is complete surgical resection. We report herein the case of a 27-year-old woman with the diagnosis of lymphangioma was acquired following a hurdle praevia.

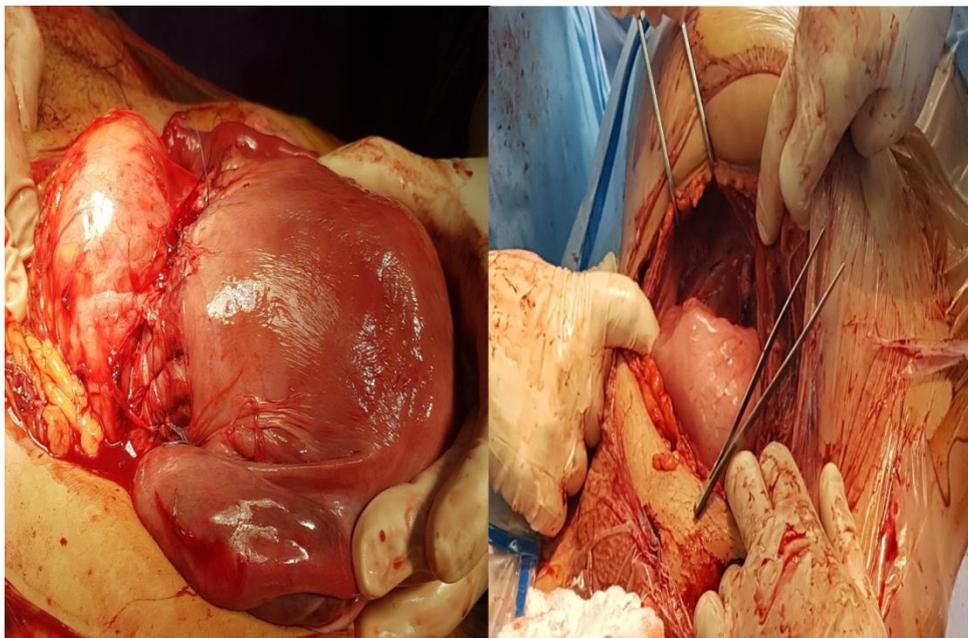
## CASE REPORT

We report herein the case of a 27-year-old woman with a 3-year history of abdominal pain without having established the diagnosis. Her menstrual and antenatal history was uneventful thus far. She was admitted with a diagnosis of delivery. The patient was evaluated by obstetric teams in the emergency department. At admission, the patient is painful EVA at

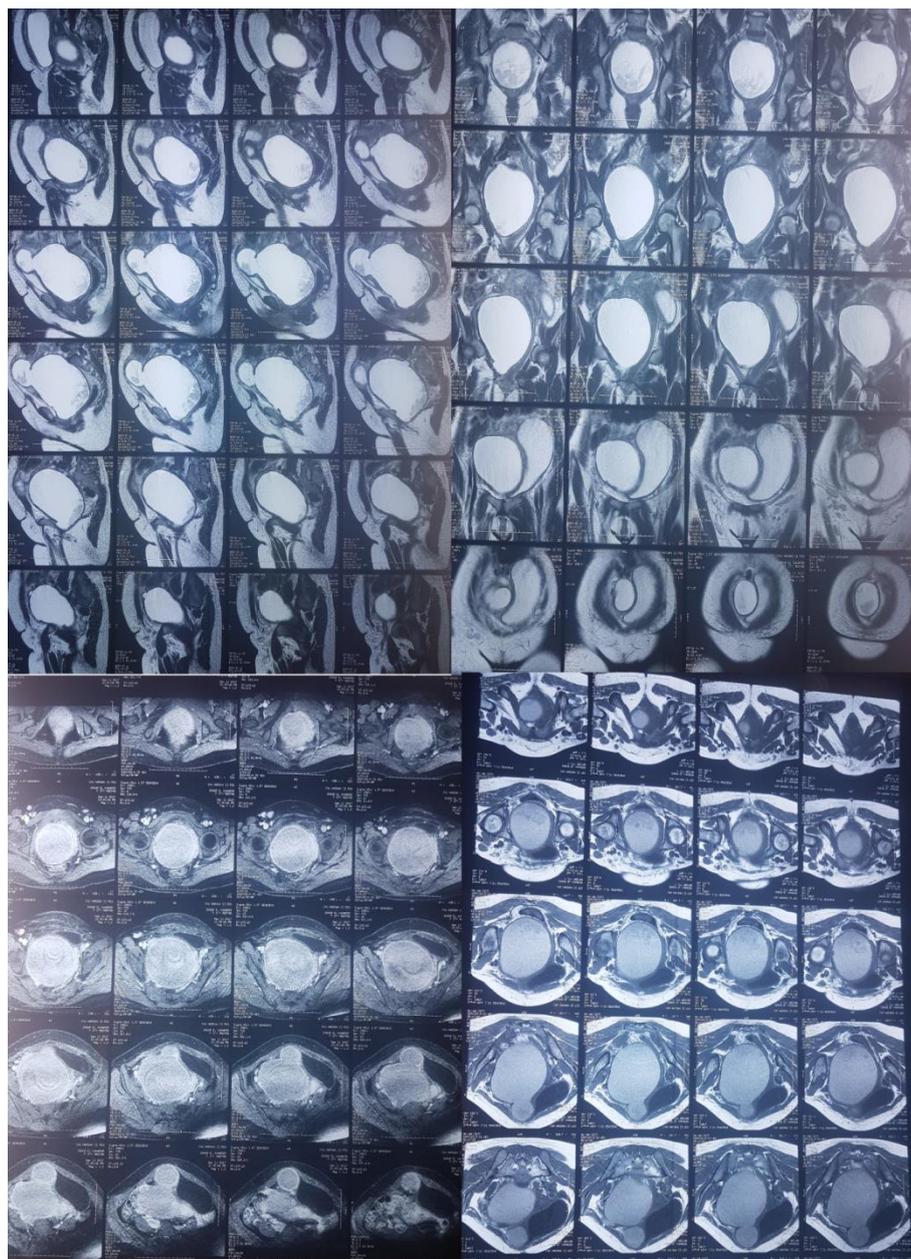
7 with a uterus released on palpation. With vaginal touch, the neck is mid-long admitting a finger, the presentation is mobile cephalic. The water pocket is intact with a sensation of a bulging mass at the level of douglas painful mobilization. At this stage we were essentially thinking of an organic cyst or a pelvic abdominal tumor. We did an ultrasound that objectified a huge cyst containing echogenic debris (Figure-1). Caesarean section was indicated for hurdle praevia. Surgical exploration found a huge cyst between the uterus and the bladder (Figure-2). We performed an extraction of a new born female birth weight 3200g. The dissection of the cyst was difficult with decision to achieve it in a second time. The normal operating suite. The patient's vital signs were within normal limits. On physical postpartum examination, a palpable and painless mass was evident in the umbilical area. Computed tomographic scanning of the abdomen and magnetic resonance imaging showed a 18-cm multiloculated cystic mass of the abdomen, pushing against the bowel and the bladder without involvement of the adjacent organs (Figure-3). A resection of the mass was performed with a complete resection. The pathologic examination revealed a cystic lymphangioma. The postoperative course was uneventful.



**Fig-1:** Ultrasound objectified a huge cyst containing echogenic debris between the uterus and the bladder



**Fig-2:** Huge cyst between the uterus and the bladder



**Fig-3: Magnetic resonance imaging showed a 18-cm multiloculated cystic mass of the abdomen, pushing against the bowel and the bladder without involvement of the adjacent organs**

## DISCUSSION

The incidence of lymphangiomas is unknown. Most series observe no sex predilection. Most cystic lymphangiomas present within the first 2 years of life, with 50% to 60% manifesting by age 1 year and 90% by age 2 years. Lymphangiomas are usually diagnosed in older children or adults. Obstacle previa by a cystic lymphangioma is very rare.

The lymphatic system is derived during the third or fourth fetal month from 2 paired and unpaired endothelial sacs that are outgrowths of the venous system. Endothelial channels proliferate centrifugally from these sacs, which are located in the neck, mesenteric root, and bifurcation of the femoral and sciatic veins. A lymphangioma is a benign proliferation

of lymphatic tissue believed to originate from the early sequestration of lymphatic vessels that fail to establish connections with normal draining lymphatics.

Lymphangiomas are therefore considered a congenital rather than an acquired tumor. After birth, they can become markedly dilated as a result of both the collection of fluid and the budding of preexisting spaces. They may form unilocular or multilocular cystic masses and can encroach on vital structures [1-4].

Upon pathologic examination, lymphangiomas have a smooth gray, pink, tan, or yellow surface. On cut sections, they may contain large macroscopic or microscopic cysts filled with chylous, serous, hemorrhagic, or mixed fluid. No capsule is present. The connective tissue is composed of collagen with and

without lymphocytes. The anatomical location and size of the endothelial-lined lymphatic channels determine the histology. Lymphangiomas have been subdivided into (1) lymphangioma simplex, a network of endothelium-lined lymph spaces located subcutaneously in the head, neck, or axilla region (2) cavernous lymphangioma, a dilated nonencapsulated cystic space lined by a single layer of flattened endothelial cells and separated by scant intervening connective tissue; and (3) cystic lymphangioma or hygroma of similar histology to the cavernous type having larger spaces. Malignant degeneration to lymphangiosarcoma. Those in the retroperitoneal site are almost always of the cystic type. No capillary type has been described in the retroperitoneum [1, 5, 6].

Retroperitoneal cystic lymphangiomas can present as a soft, slowly growing, and painless mass. The mass may be an incidental finding during the evaluation of an unrelated complaint. Its development is continued expansion, which causes abdominal discomfort. Symptoms occur only after the enlarging mass distorts and compresses the adjacent structures (intestinal obstruction, ureteric obstruction). They may acutely enlarge following an infection, hemorrhage, rupture, or torsion. Trauma may precipitate bleeding. When lymphangiomas present acutely, they can cause abdominal pain, tenderness, distension, peritonitis, dysuria, fever, leukocytosis, and guarding. No clinical feature serves to differentiate retroperitoneal lymphangiomas from other retroperitoneal masses. [7-9] in our case the diagnosis of lymphangioma was acquired following a hurdle praevia.

Ultrasonography and computed tomographic scans are highly sensitive in the diagnosis of abdominal cystic lymphangioma and provide information regarding location, size, adjacent organ involvement, and expected complications. Sonographically, lymphangiomas are multiloculated cystic masses that are anechoic or contain echogenic debris. Ultrasound is a sensitive imaging modality to identify septations and layering debris in cystic abdominal masses. With magnetic resonance imaging, the delineation of the mass from the surrounding vascular and soft tissues can be more accurately assessed. The masses typically surround and compress normal structures. Low signal intensity is seen on T1-weighted images. High signal intensity, significantly higher than that of surrounding fat and muscle, is seen on T2-weighted images. Signal intensity may vary on T1- and T2-weighted images because of the varying compositions of the fluid-filled cysts [1, 4, 5, 10, 11].

When possible, the treatment of choice is complete surgical resection. Invasion of adjacent organs or adhesions may necessitate partial resection of the associated organ. Although prognosis is excellent after surgical excision, a low recurrence rate exists. Lymphangiomas rarely undergo malignant change or

spontaneous regression [12]. Aspiration, drainage and irradiation of lymphangioma gives poor results; therefore a complete resection with negative microscopic margins is the optimal treatment and the prognosis is excellent. If it is not excised completely, the intra-abdominal cystic lymphangioma has a 10% postoperative recurrence rate [13]. Intralesional injection of OK-432 therapy was also employed in patients after incomplete surgical excision or failed bleomycin injection therapy, but less than 30% of these lesions improved. This may be related to the obliteration of the intercommunication between cysts secondary to previous therapy [14]. While most patients had an inflammatory reaction related to the OK-432 injection, none had clinical evidence of scarring to the overlying skin. This is in marked contrast to other sclerotherapy regimens, with which perilesional scarring is common [15, 16]

## CONCLUSION

Cystic lymphangioma is an uncommon intra-abdominal lesion. Ultrasonography and computed tomographic scans are highly sensitive in the diagnosis. Prognosis is excellent after complete surgical excision, a low recurrence rate exists. Lymphangiomas rarely undergo malignant change or spontaneous regression.

**Conflicts of Interest:** None of the authors have any conflicts of interest to declare.

**Consent:** Written informed consent was obtained from the patient prior to the writing of the case report.

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