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Case Report

Case Report: Unmasking Meigs' Syndrome and the resolution of persistent Ascites after Oophorectomy in an 18-year-old Female at Cleveland Specialized Clinic Wampewo

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Abstract: Introduction: Meigs' Syndrome, characterized by a benign ovarian tumor that leads to ascites and occasionally pleural effusion, is a rare condition that often presents significant diagnostic challenges, particularly in young female patients. This case report highlights an 18-year-old-female with persistent gross ascites and pleural effusion unresponsive to diuretics, paracentesis, and thoracentesis. Despite extensive diagnostics evaluations including negative results from several tumor makers, histology and pathology reports, Liver and renal function tests, abdominal CT scans, ECHO, Ecg, Chest X-rays and HBV screening PCR test, the underlying causes of the ascites and pleural effusion remained elusive. The diagnosis was only made following an exploratory laparotomy, which revealed the presence of bilateral benign ovarian tumors. Subsequent bilateral Oophorectomy and Salpingectomy resulted in the complete resolution of the ascites. This case underscores not only the importance of considering ovarian pathology in young females with unexplained ascites but also highlights the critical role of exploratory laparotomy when non-invasive diagnostics fails to provide answers. **Conclusion:** This case emphasizes the need for a high index of suspicious for Meigs' Syndrome in young females presenting with persistent ascites and pleural effusion, even when standard diagnostic tests yield negative results. It highlights the potential necessity of surgical intervention when other diagnostic approaches fail to identify the underlying causes. Clinicians should be aware of this condition and consider it in their differential diagnosis to ensure appropriate and effective management.

Keywords: Meigs' Syndrome, Ascites, Oophorectomy, Case report, Benign Ovarian Tumor

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1. Introduction

Meigs' Syndrome is a rare clinical condition (IMRAN, HAIDAR, & AKHATAR) [1] that is traditionally defined by the triad of a benign Ovarian tumor, ascites, and pleural effusion, all of which resolve after the removal of the tumor. Although it predominantly affects postmenopausal women, its occurrence in young female patients is extremely rare, making this case particularly unique and noteworthy (Al Harbi, McNeish, & El-Bahrawy, 2021; Khan et al., 2005) [2,3]. The syndrome is often misdiagnosed due to its nonspecific symptoms and common association of ascites with malignant conditions, leading to extensive, of the inconclusive, investigations as seen in this case. In this report, we present an 18-year-old female who exhibited persistent gross ascites resistant to conventional treatment methods such as diuretics, paracentesis, thoracentesis, and to many other therapeutic conventional medicines. Despite extensive diagnostic workup, including negative results from tumor makers, liver and renal function tests, and unmarkable histopathology reports, GeneXpert reports, and unmarkable imaging findings, the underlying cause of the ascites remained unidentified. This diagnostic dilemma persisted until an exploratory laparotomy revealed bilateral benign ovarian tumor similar to that

was presented by Sharmila& friends (Sharmila, Saichandran, Babu, & Singh, 2013) [4], which upon removal led to the complete resolution of symptoms, thereby confirming the diagnosis of Meigs' Syndrome. The rarity of Meigs' Syndrome in adolescents and the challenging diagnostic process underscore the importance of considering this condition even in atypical patient populations. The case also highlights the critical role of exploratory laparotomy when non-invasive diagnostic methods fail to provide definitive answers. Previous studies have noted the rarity of Meigs' Syndrome in young patients, making this case a significant contribution to the existing literature (Brillantino et al., 2021; Khan et al., 2005) [3,5].

2. Case Presentation

Patient's information: An 18-year-old-female of Ugandan origin, residing in Kasangati-Gayaza, Wampewo, Wakiso district. She is a student with no prior medical or surgical history and no known allergies. She sought medical attention at Cleveland Specialized clinic, Wampewo, Kampala-Uganda, between February, 2023 and June 2024. The primary concern was persistent stomach pain, empty fullness of the stomach, accompanied a grossly distended abdomen with persistent ascites, associated severe breathlessness, generalized body weakness, pallor, and significant muscle wasting over several months. The patient reported fatigue, weight loss, and lack of response to multiple courses of antibiotics therapy. Despite repeated use of diuretics and several abdominal paracenteses, and thoracentesis, the ascites reaccumulates within a week, causing ongoing discomfort and impaired physical activity. The medical, family and psychosocial history, including Genetic information; The patient had no prior history of chronic illnesses such as liver diseases, Kidney, or cardiovascular medical conditions nor history of obstetric and gynecological conditions. There was no known history of malignancy in the patient or her immediate family, and no family history of genetic disorders. Psychosocial history was unremarkable, with no significant stressors, and she was not exposed to known occupational or environment hazards. The patient had no history of smoking, alcohol consumption, or drug abuse. Genetic information was not contributory, and there was no indication of hereditary conditions that could explain her symptoms. The relevant past intervention and their outcomes: The patient underwent extensive diagnostic evaluations to determine the etiology of the persistent ascites; (1) Multiple abdominal paracenteses and thoracenteses were performed, providing only temporary relief from ascites before fluid reaccumulates within a week. (2) Diuretics therapy was initiated but was ineffective in prevention the recurrent accumulation of ascitic fluid. (3) Regimens antibiotics was also administered with no improvement. (4) Comprehensive laboratory and imaging test include; (a) GeneXpert analysis on ascitic fluid for tuberculosis; was done Negative as indicated in the Figure 1. (b) Liver function test (LFTs), and Renal function tests (RFTs) were done: Normal, Figure 2 (c) Tumor markers including (CA125, CEA, AFP, CA19-9, PAP smear) All negative. (d) Figure 3 and Figure 4. Cytological analysis of ascitic fluid was done with; No evidence of malignant cells was observed. Biopsy for histology on the liver, uterus, cervix, kidney, illum, and ovary had no evidence of malignancy cells. (e) Abdominal Ultrasound scan was performed with no remarkable findings. Figures 5, 6, 7 and 8. Abdominal CT scan: Unremarkable, with no signs of malignancy, ovarian masses, or others abnormalities. (f) Chest X-ray, Echocardiography and ECG; were performed and there were No evidence of cardiac pathology of pleural effusion. (g) Serological tests for Hepatitis B, Hepatitis C virus and other infections causes were; Negative. Despite these extensive investigations, the cause of the ascites remained unclear. An exploratory laparotomy was eventually performed, which reveals bilateral ovarian tumors. A bilateral oophorectomy and salpingectomy were conducted, and histopathological examination of the removed ovaries confirmed the diagnosis of benign ovarian fibromas. Following surgery, the patient's symptoms resolved completely, with no recurrence of ascites during the follow-up period.

Assay Information

Assay	Assay Version	Assay Type
Xpert MTB-RIF Ultra	4	In Vitro Diagnostic

Test Result: MTB NOT DETECTED

Analyte Result

Analyte Name	Ct	EndPt	Analyte Result	Probe Check Result
SPC	24.8	135	PASS	PASS
IS1081-IS6110	0.0	3	FAIL	PASS
rpoB1	0.0	1	INVALID	PASS
rpoB2	0.0	3	INVALID	PASS
rpoB3	0.0	4	INVALID	PASS
rpoB4	0.0	2	INVALID	PASS

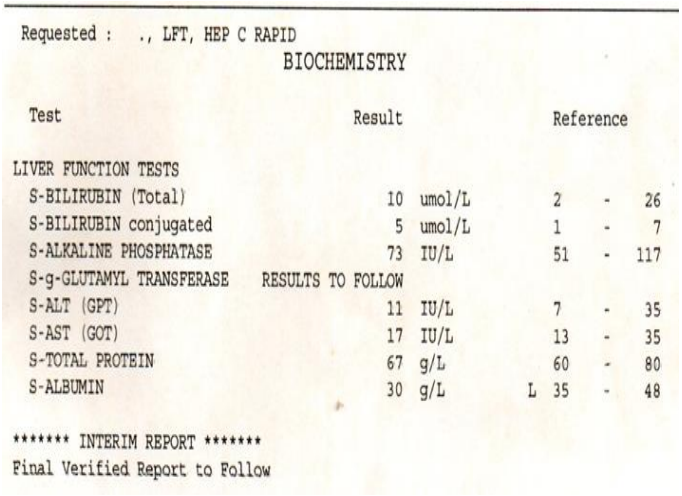
User: EXAMINA DIAGNOSTIC LAB
Status: Done
Expiration Date*: 18/02/24
S/W Version: 6.4
Cartridge S/N*: 812216827
Reagent Lot ID*: 35602
Notes:
Error Status: OK
Start Time: 12/07/23 16:29:18
End Time: 12/07/23 17:35:51
Instrument S/N: 0
Module S/N: 603812
Module Name: A2

For In Vitro Diagnostic Use Only.

EXAMINA 12 JUL 2023 LABORATORY

GeneXpert® Dx System Version 6.4 CONFIDENTIAL Page 1 of 2

Figure 1. GeneXpert was done on ascitic fluid and was Negative.



Requested : ., LFT, HEP C RAPID

BIOCHEMISTRY

Test	Result		Reference
LIVER FUNCTION TESTS			
S-BILIRUBIN (Total)	10	umol/L	2 - 26
S-BILIRUBIN conjugated	5	umol/L	1 - 7
S-ALKALINE PHOSPHATASE	73	IU/L	51 - 117
S-g-GLUTAMYL TRANSFERASE	RESULTS TO FOLLOW		
S-ALT (GPT)	11	IU/L	7 - 35
S-AST (GOT)	17	IU/L	13 - 35
S-TOTAL PROTEIN	67	g/L	60 - 80
S-ALBUMIN	30	g/L	L 35 - 48

******* INTERIM REPORT *******
Final Verified Report to Follow

Figure 2. Normal Liver function test results, with a mild elevetion of albumin of 30 g/ dL.

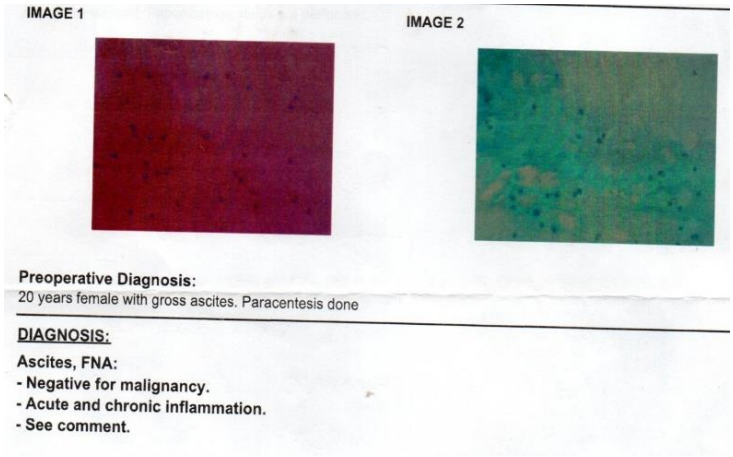
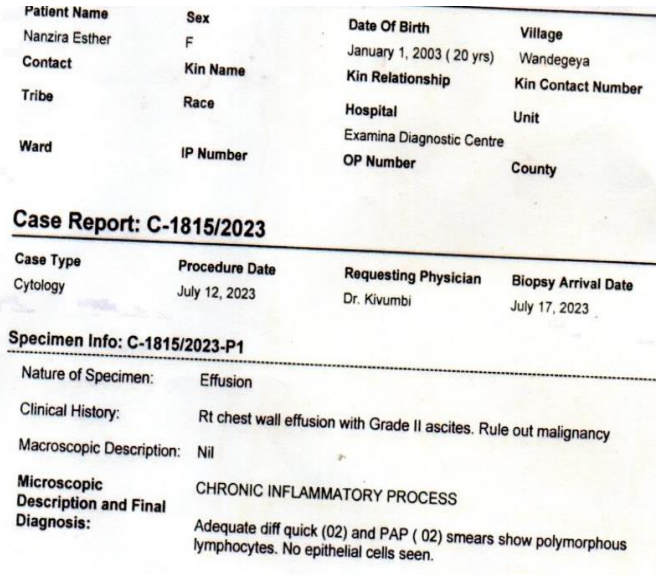


Figure 3. This shows negative histopathology – No malignancy.



Patient Name	Sex	Date Of Birth	Village
Nanzira Esther	F	January 1, 2003 (20 yrs)	Wandegeya
Contact	Kin Name	Kin Relationship	Kin Contact Number
Tribe	Race	Hospital	Unit
		Examina Diagnostic Centre	
Ward	IP Number	OP Number	County

Case Report: C-1815/2023

Case Type	Procedure Date	Requesting Physician	Biopsy Arrival Date
Cytology	July 12, 2023	Dr. Kivumbi	July 17, 2023

Specimen Info: C-1815/2023-P1

Nature of Specimen:	Effusion
Clinical History:	Rt chest wall effusion with Grade II ascites. Rule out malignancy
Macroscopic Description:	Nil
Microscopic Description and Final Diagnosis:	CHRONIC INFLAMMATORY PROCESS Adequate diff quick (02) and PAP (02) smears show polymorphous lymphocytes. No epithelial cells seen.

Figure 4. Negative cystology report.

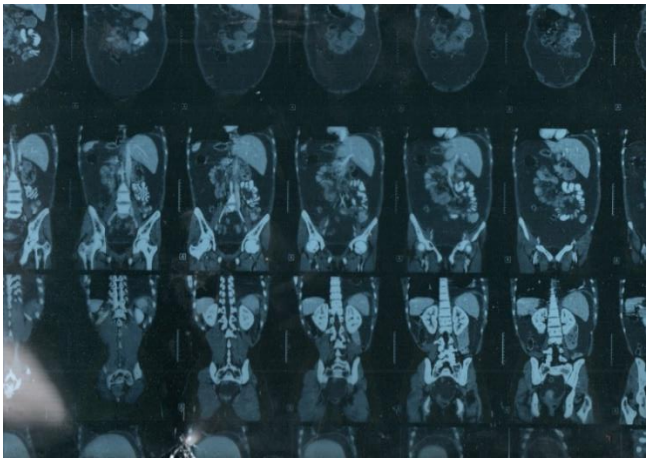


Figure 5. III defined heterogenerously enhancing lessions are noted in the bilateral adnexa.

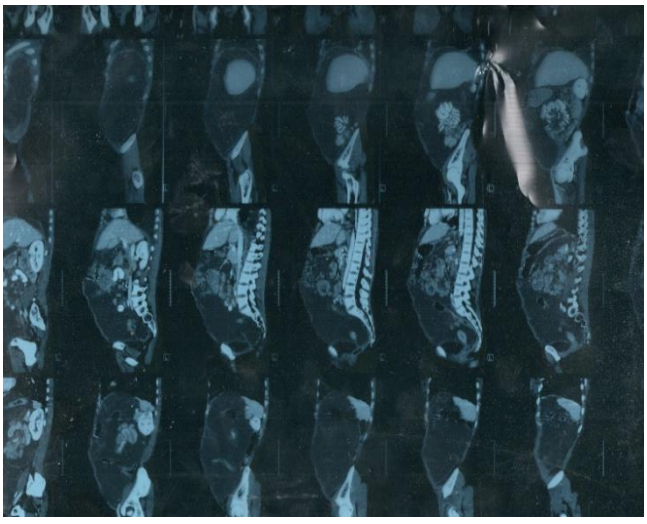


Figure 6. Diffuse heterogeneous thickening of omentum and mesentery noted in the abdomen. Clumping of the bowel loops are seen in the upper and mid abdomen. Suggestive of carcinomatous peritoneal.

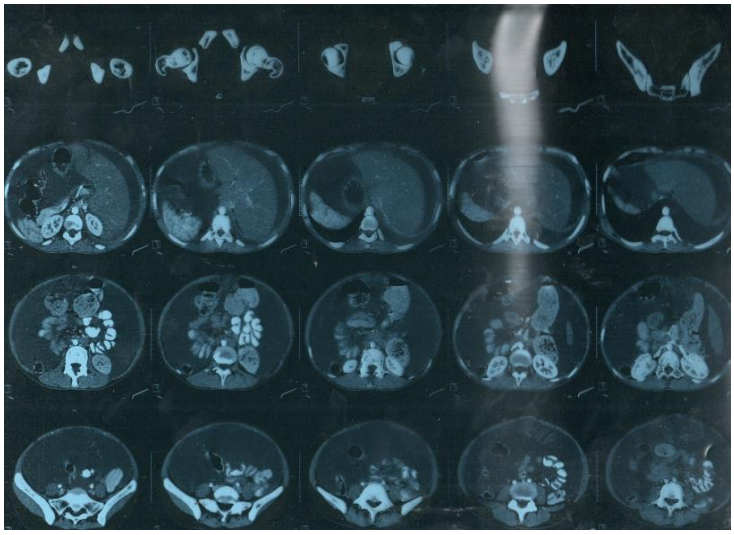


Figure 7. Both ovaries not seen separately; Features may suggest bilateral ovarian neoplasm; Several right sided pleural effusion, and subsegmental collapse of right lower and middle lobe.

Figure 8. Gross ascites noted with free fluid in the perihepatic, perisplenic, interbowel loop and pelvis.

Clinical Findings; Relevant Physical Examination (PE): On initial presentation, the patient appeared markedly weak and cachectic, with significant muscles wasting and generalized pallor, key physical examination findings included: Vital signs: Blood pressure (BP) 100/56 mmhg, Heart rate (HR): 93 beats per minute, Respiratory rate (Rr): 22 breaths per minute, Temperature (T): 36.7^{0}c, Oxygen saturation (SPO_2): 92% on room air. ABDOMINAL EXAMINATION (BD): Grossly abdominal distention with visible veins and an everted umbilicus. Noted shifting dullness and fluid thrill were positive, indicative of massive ascites. There was no palpable organomegaly nor any markable abdominal masses seen. The Bowel sounds were present and normoactive. There was mild tenderness upon deep palpation, but on rebound tenderness of guarding. Cardiovascular examination (CVS): Heart sounds were normal (S1 and S2), with no murmurs, rubs, or gallops. There was no evidence of Jugular venous distention (JVD) or peripheral edema. Respiratory Examination (R/S): Reduced breath sounds at the lung bases, suggestive moderate basal atelectasis secondary to abdominal distention. On the chest exam further, there was a reduce breaths sound in bilateral lung fields bases suggesting moderate

pleural effusion, though the patient was not in severe respiratory distress**.** Other systematic Examination(O/E): Neurological examination and Central Nerve system (CNS): Neurological examination was unremarkable, with no focal deficits. There was no lymphadenopathy noted in the cervical, axillary, or inguinal regions. The skin examination revealed no jaundice, nor cyanosis or rash. The eyes were not yellow, but were moderately pallor, suggesting mild anemia. Other clinical findings: The patient's laboratory tests, including Complete blood count (CBC), revealed mild anemia (Hemoglobin:9.2 g/dL) with normal white blood cell and platelet counts. The liver and renal function teste were within normal ranges. The electrolytes, including sodium, potassium, calcium, and magnesium levels were all normal. The coagulation profile (PT, aPTT) was normal. The Ascites fluid analysis showed a transudative patters with low protein (albumin level: 1.2 g/dL) and no malignant cells of signs of infections.

Timeline: The Relevant data from this episode of care organized as a timeline**.**

Table 1. Timeline of Patient's care timeline

Date	Event	Details
February 2023	Initial presentation	18-year-old female presented with severe breathlessness, gross abdominal distention due to persistent ascites, generalized weakness, and pallor.
March 2023	Initial Diagnostic workup	Blood tests (CBC, LFTs, RFTs), tumor markers, and imaging studies (ultrasound scan, CT scan, Echo, ECG) performed; all results were unremarkable
April 2023	Repeated paracenteses, and thoracenteses	Ascitic fluid drained, providing temporary relief. Ascitic fluid analysis showed transudative pattern; GeneXpert analysis for TB was Negative.
May 2023	Persistent symptoms	Re-accumulation of ascitic fluids within one week despite diuretic therapy and multiple presentences
June 2023	Extended diagnostics investigation	Additional tests conducted: Chest X-ray, ECG, echocardiogram, serological tests for infections (HIV, HBV, HBC) all Negative, histopathology report Negative
Jully 2023	Specialist referral and continued monitoring	Referral to a specialist; continued monitoring and symptomatic management with no significant improvement
August 2023	Decision for Exploratory laparotomy	Due to persistent unexplained ascites and negative findings, a decision was made to perform an exploratory laparotomy.
September 2023	Continued monitoring a waiting for Fund	Continued monitoring and control of ascites and pleural effusion, with diuretics and paracenteses and thoracenteses as waiting for funds
October 2023	Exploratory laparotomy performed	Bilateral oophorectomy and salpingectomy performed; intraoperative findings revealed bilateral ovarian tumors
November 2023	Histopathology results	Histopathology confirmed benign ovarian fibromas consistent with Meigs' Syndrome; No evidence of malignancy
December 2023	Postoperative recovery	Patient experienced complete resolution of symptoms, with no further ascites accumulation or abdominal distension
January-February 2024	Follow-up Examination 1.	Follow-up visit showed stable condition, no recurrence of symptoms, normal physical examination, with maintenance small dose of diuretics
March-April 2024	Second last follow-up examination	Patient remained asymptomatic with no recurrence of ascites, overall clinical status was stable, and the patient resumed normal activities.
June 2024	Final follow-up examination	Patient withdrawn from all drugs. Patient remained asymptomatic with no recurrence of ascites.

Diagnostic assessment: Diagnostic Methods; Physical Examination (PE): The initial examination revealed a young female with significant abdominal distention, muscle wasting, and generalized pallor. The presence of shifting dullness and positive fluid thrill suggested massive ascites. There was No palpable abdominal masses or organomegaly were seen. The cardiovascular, respiratory, and neurological examination were

unremarkable, except for mild basal atelectasis due to the abdominal distension. Laboratory Testing: **C**omprehensive blood work-up, including complete blood count (CBC), Liver function test (LFTs), Renal function test (RFTs), and coagulation profiles, were performed. The results indicated mild anemia (Hemoglobin: 9.2 g/ dL) with normal white blood cell and platelet counts. LFTs revealed normal liver test with moderate albumin decrease of 30.0 g/dL, but with normal renal function test result, and with normal coagulation profile test. The ascitic fluid analysis: The ascitic fluid was analyzed multiple times, revealing a transudative patten with low protein content (Albumin: 30.0 g/ dL). There was no evidence of infection, malignance, or tuberculosis (GeneXpert TB test was negative). The serology and infectious disease Testing: Tests for viral hepatitis (HBV and HBC) and other infections causes were negative. Imaging studies: Abdominal Ultrasound(US) and CT scan: US scan report indicated no abnormalities were detected, while the Abdominal CT scan indicated mild Neoplasm ovaries bilaterally, though all the imaging modalities showed significant gross ascites, but were otherwise unremarkable, with no identifiable masses or organ abnormalities. The Chest X-ray and Echocardiogram: Evaluated to rule out cardiopulmonary causes of ascites, both showed no evidence of heart failure, but indicated remarkable features of pleural effusion, but without clear pathology, or abnormalities. Electrocardiography (ECG); indicated normal results, ruling out cardiac involvement. The surveys and additional testing; indicates that, no surveys were conducted, as the diagnostic focus was on physical findings, laboratory testing and imaging studies. Diagnostic Challenges: This case presented several diagnostic challenges which include; Non-specific symptoms and findings. The patient's primary symptoms which include; (abdominal discomfort, empty- fullness, eating little and feels full, and abdominal heaviness, then after, abdominal distension, ascites follow), and initial workup results were non-specific, which did not directly point to a particular diagnosis. The negative results from initial diagnostic test; The normal tumor markers, unremarkable imaging, and lack of evidence for infection or malignancy complicated the diagnostic process, delaying definitive diagnosis. Rarity of Meigs' Syndrome is rare, especially in young women, leading to its lower consideration in the initial differential diagnosis. The Diagnostic Reasoning and Differential Diagnosis; Given the presentation of ascites with no apparent malignancy or infection, the differential diagnosis initially included; (1) Liver cirrhosis: Ruled out due to normal liver function tests and imaging showing no signs of cirrhosis or portal hypertension. (2) Nephrotic syndrome; excluded based on normal renal function test and no proteinuria. (3) Heart Failure; Ruled out by normal ECG, chest X-ray, and echocardiogram findings. (4) Tuberculosis; Considered due to endemicity, but excluded by Negative GeneXpert results and lack of supportive clinical findings. (5) The Ovarian Tumor or Malignancy: Despite negative tumor markers and histopathology, and unremarkable imaging, this remained a consideration given persistent symptoms; ultimately confirmed through exploratory laparotomy. After excluding more common causes and given the persistence of symptoms and ascites, the decision was made to proceed with an exploratory laparotomy. This led to the identification of bilateral ovarian fibromas, confirming the diagnosis of Meigs' Syndrome. The complete resolution of symptoms. post-surgery further supported this diagnosis. Prognostic Characteristics**:** The prognosis for patients with Meigs' Syndrome is generally excellent once the benign ovarian tumor is removed. In this case, the patient had a full recovery with no recurrence of symptoms or ascites during follow-up. The patient's young age and lack of comorbidities also contributed to a favorable outcome. Therapeutic intervention: Types of intervention: The pharmacological intervention. The patient initially received diuretics, antibiotic cover, anti-inflammatory drugs, and analgesics to manage stomach pain and ascites. Despite temporary relief, ascites recurred within a week of each intervention, and diuretics alone were ineffective in providing sustained symptoms control. The surgical intervention: An exploratory laparotomy was performed after conservative management failed to resolve the persistent ascites. During surgery, bilateral oophorectomy and

salpingectomy were conducted to remove both ovaries and fallopian tubes, where benign ovarian fibromas were identified. The administration of interventions. Diuretics (Lasix) administered at dose of 40 mg once daily for several days, then oral water pills like a combination of spironolactone(12.5mg) and metolazone(2.5mg) were give as maintenance dose for several months. Ascites and pleural effusion reaccumulated soon after discontinuation of the medication, necessitating repeated abdominal paracentesis and thoracentesis. Abdominal Paracentesis: Multiple therapeutic paracentesis and thoracenteses were performed to alleviate symptoms. Approximately 2-3 Liters of ascitic fluid were drained per session. The surgical procedure (Exploratory Laparotomy); performed under General anesthesia. The intervention involved the removal of both ovaries and fallopian tubes, which led to complete resolution of ascites. The Changes in interventions: After several months of ineffective pharmacologic management (Diuretics) and multiple paracenteses, the treatment approach shifted from conservative management to surgical intervention due to the persistent nature of the ascites and the failure to identify a definitive cause through non-invasive methods. The decision to perform an exploratory laparotomy was based on the suspicion of a possible ovarian source of the ascites, which was later confirmed during surgery. Follow-up and outcomes: Clinician and patient-Figure 9. Assessed Outcomes; Post-surgical follow-up showed complete resolution of ascites and abdominal distension. Physical examinations conducted one week, one month, and three months after surgery confirmed the absence of fluid accumulation and other symptoms. There was no recurrence of ascites, and the patient's overall condition improved significantly. Patient-Assessed Outcome. The patient reported a substantial improvement in symptoms, including relief from breathlessness, abdominal discomfort, and fatigue. The patient also noted a return to normal activities and overall well-being within two months of the surgery. The important Follow-Up Diagnostic and Other Test Results; The ultrasound and physical Examination; Follow-up abdominal ultrasound conducted at one-and three-months post-surgery showed no evidence of fluid accumulation or masses, confirming the complete resolution of ascites. Laboratory Test: Follow-up blood tests, including Complete blood count (CBC), Liver function test (LFTs), and Renal function test (RFTs) were repeated and were within normal ranges, with no abnormalities detected. The intervention adherence and Tolerability; Adherence. The patient adhered to the post-operative care plan, which included pain management and wound care. Regular follow-p visits were attached as scheduled (Table 1) Tolerability: The patient tolerated the surgical intervention well, with no complications reported during or after the procedure. Recovery was uneventful, with no signs of infection, excessive bleeding, or other surgical complications. Adverse and Unanticipated Event: There no adverse or unanticipated events reported during the post-operative period. The patient had a smooth recovery and did not experience any surgical complications or new symptoms. The absence of recurrence of ascites or other complications over the follow-up period further confirmed the success of the intervention (Figure 9).

Figure 9. June Final follow-up examination.

3. Discussion

This case of an 18-year-old female presenting with persistent ascites, which resolved only after the surgical removal of both ovaries and fallopian tubes, highlights the diagnostic challenge of Meigs' Syndrome, particularly in younger female patients with atypical presentations. Meigs' Syndrome, characterized by the triad of benign ovarian tumor, ascites and pleural effusion, is rare, with most cases occurring in postmenopausal women. The uniqueness of this case lies in the presentation of a young female patient with no initial clinical or radiological indication of an ovarian tumor making it a diagnostic challenge until surgical exploration was performed.

One of the strengths of this case report is its contribution to the limited literature on Meigs' Syndrome in young female patients. Most case documented in medical literature involved older women, predominantly postmenopausal, and it is uncommon for this syndrome to manifest in someone as young as our patient (Marco Antonio Hernández et al., 2023; Quda, Al-rayyan, Al-Ibrahim, Al-Fayiz, & Emoush, 2016) [6,7]. This case supports the notion that Meigs' Syndrome should be considered in the differential diagnosis for unexplained ascites, even in younger patients, especially when other causes have been excluded. Moreover, it underscores the importance of a comprehensive diagnostic approach, including exploratory laparotomy, when non-invasive methods fail to provide a conclusive diagnosis.

However, the case also has several limitations. One limitation is the lack of specific preoperative imaging findings that could have guided the diagnosis more accurately. Ultrasound (USS), Computed tomography (CT scan), and X-ray did not reveal any masses, which is often the case with small or non-palpable ovarian tumor (Ambrosetti et al., 2015; Charkhchi et al., 2020) [8,9]. Additionally, the patient's condition necessitated a combination of multiple thoracentesis and paracenteses and the use of diuretics, which only provided temporary relief, potentially delaying the definitive diagnosis and surgical intervent4ion. Another limitation is the absence of pelvic visible and remarkable tumor which is a more classic features of Meigs' Syndrome and could have further guided the diagnosis (Stein & Elson, 1948) [10], and what challenged more the management processes

was the presence of massive pleural effusion. The scientific rationale for the conclusions drawn in this case hinges on the established criteria for the diagnosing Meigs' Syndrome, which requires the presence of a benign ovarian tumor, ascites, and often pleural effusion, with resolution of symptoms following tumor removal (Quda et al., 2016) [7]. The complete resolution of the patient's ascites after bilateral oophorectomy and salpingectomy supports the diagnosis of Meigs' Syndrome, even in the absence of pleural effusion. This case adds to the body of evidence suggesting that Meigs's Syndrome can present with several variable symptoms and my not always include all classic signs, emphasizing the need for vigilance in diagnosis. The primary "take-away" lessons from this case report are as follows; Clinicians should consider Meigs' Syndrome as a potential diagnosis in young female patients with unexplained ascites, especially after excluding more common causes. Additionally, exploratory laparotomy remains a valuable diagnostic tool when non-invasive tests are inconclusive, as it can confirm the diagnosis and provide therapeutic benefits. Finally, this can case highlight the necessity of maintaining a broad differential diagnosis in young female patients presenting with rare manifestation of typically age-specific diseases.

4. Conclusion

This case of Meigs' Syndrome in a young female patient demonstrates the diagnostic complexities associated with rare presentations of this syndrome. It emphasizes the importance of considering ovarian pathology in case on unexplained ascites, even in the absence of typical signs such as generalized body fatigue or malaise, or even pleural effusion, and the value of surgical exploration when other diagnostic methods fail. This case contributes to the growing body of literature on Meigs' Syndrome and highlights the need for awareness among clinicians of its potential occurrence in even young female patients.

Patient Perspective

The patient expressed relief and gratitude for the resolution of her symptoms following the surgical intervention. She described the months leading up to the diagnosis as extremely challenging, marked by persistent abdominal discomfort, weakness, and repeated medical consultations with little improvement. After the surgery, she felt hopeful and appreciated the thorough investigation and care provided by the medical team. She emphasized the importance of listening to her concerns and exploring all possible causes when initial treatments did not yield results.

Author Contributions

Dr. Innocent Ssemanda led the conceptualization, design, data collection, analysis, and drafting of the manuscript. Dr. Kalembe Brenda, Dr. Brian SSenyonga, Dr. Mariam Nanfuka, and Dr. Okello Daniel contributed to the clinical management of the patient, data acquisition, diagnostic assessment, and provided critical revisions to the manuscript. All authors reviewed and approved the final manuscript.

Ethical Statement

Written informed consent was obtained from the patient for the publication of this case report, including all associated images and clinical information. The patient's confidentiality has been protected by de-identifying all personal information. The study was conducted following ethical guidelines and standards for reporting patient data and was approved by the institutional review board where applicable.

References

[1] IMRAN, H., HAIDAR, F., & AKHATAR, S. S. Prevalence of Meigs Syndrome.

[2] Al Harbi, R., McNeish, I. A., & El-Bahrawy, M. (2021). Ovarian sex cord-stromal tumors: an update on clinical features, molecular changes, and management. *International Journal of Gynecologic Cancer*, *31*(2).

[3] Khan, J., McClennan, B. L., Qureshi, S., Martell, M., Iyer, A., & Bokhari, S. J. (2005). Meigs syndrome and gliomatosis peritonei: a case report and review of literature. *Gynecologic oncology*, *98*(2), 313-317.

[4] Sharmila, V., Saichandran, S., Babu, T., & Singh, D. (2013). A rare case of bilateral ovarian fibroma presenting as Meigs syndrome. *Journal of Obstetrics and Gynaecology, 33*(6), 636-636.
[5] Brillantino, C., Errico, M. E., Minelli, R., Esposito, F., Pirisi, P., Gaglione, G., . . . Rossi, E. (2021). Early diagnosis of Meigs syndrome in children A case report and a review of the literature. *Annali Italiani di Chirurgia, 10*(July), 1-4.
[6] Marco Antonio Hernández, M., Zaida Fernanda Zarazúa, S., Juan Eduardo Galván, C., Luis Enrique Morales, M., Onassis Armando Prado, H., & Marlo Ramón Narváez, P. (2023). Meigs Syndrome: A Comprehensive Review of Clinical Presentation, Diagnosis, and Management. *International Journal of Medical Science and Clinical Research Studies, 3*(10). doi:10.47191/ijmscrs/v3-i10-59
[7] Quda, S., Al-rayyan, E., Al-Ibrahim, N., Al-Fayiz, N., & Emoush, R. (2016). Management of Meig's Syndrome: Experience at the Jordanian Royal Medical Services. *JRMS, 23*(4), 76-82.
[8] Ambrosetti, M. C., Bernardin, L., De Robertis Lombardi, R., Crosara, S., Castelli, F., Rockall, A., Mucelli, R. P. (2015). Neoplasms of the Ovary. *MRI of the Female and Male Pelvis*, 129-158.
[9] Charkhchi, P., Cybulski, C., Gronwald, J., Wong, F. O., Narod, S. A., & Akbari, M. R. (2020). CA125 and ovarian cancer: a comprehensive review. *Cancers, 12*(12), 3730.
[10] Stein, I. F., & Elson, R. (1948). Meigs Syndrome. *Diseases of the Chest, 14*(5), 722-729. doi:10.1378/chest.14.5.722