HealthNews DIGEST

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Aster HOSPITALS & CLINICS

We'll Treat You Well

Dr. Sherbaz Bichu

CEO & Specialist Anaesthetist
Aster Hospitals & Clinics, UAE

On behalf of Aster's leadership, I welcome you to the 18th edition of the HealthNews Digest. As we enter the second month of the year, I want to thank all of our doctors at Aster Hospitals and Clinics for sharing and outlining the challenging cases they handle and imparting their wisdom to other medical professionals.

At Aster, we understand the critical role that healthcare professionals like you play in our community. Your relentless efforts to care for patients, compassion, and expertise to keep our communities safe and healthy are laudable.

Thank you for your commitment and dedication to your patients and the broader healthcare community. Please continue sharing your knowledge and expertise to help improve the quality of care we provide and stay up-to-date with the latest research and techniques in our respective fields.

Dr. Ramanathan V

Medical Director
Aster Hospitals & Clinics, UAE

As the Medical Director for Aster Hospitals and Clinics, I'd like to thank our exceptional team of Aster physicians for enthusiastically supporting this initiative by contributing their knowledge to ensure clinical excellence and the highest quality of patient care.

The passion for this knowledge and the experience-sharing program has only grown from the beginning, bolstering our efforts to provide high-quality and finest healthcare. I encourage you to keep up the excellent work and continue to share your knowledge and insights with the medical community.

Your contributions are invaluable, and I am confident that you will continue to support this initiative enthusiastically.

Dr. Sunil Vyas
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Chronic Eosinophilic Pneumonia (CEP) presented as Severe Persistent Asthma treated successfully at Aster Hospital, Muhaisnah

PRESENTATION

- 50 year old male
- Medical history of Diabetes Mellitus (on medications) and Obstructive Airway Disease
- Admitted with:
  - Complaints of shortness of breath with productive whitish sputum
  - High-grade fever (40°C) for a day
  - Low oxygen saturation (85%) on room air

FINDINGS

During Examination:

- Conscious and oriented
- Febrile (40°C)
- Vitals:
  - BP - 100/68 mmHg
  - HR - 83/min
  - RR - 19/min
  - SpO2 - 99% on 3L O2
  - T - 40°C
  - GRBS - 163mg/dL
- Bilateral wheeze and crepitus in the chest

Lab Investigations:

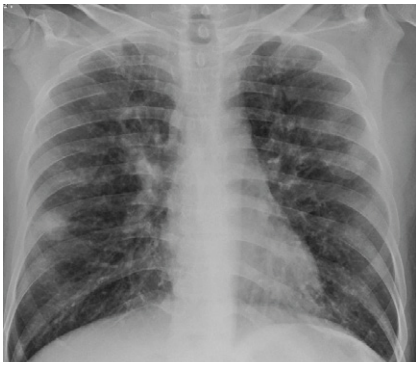
- Total White Cell Count (TLC): 15.17 (4-11)
- Eosinophil Count: 47.1% (1-6)

Chest X-ray showed:

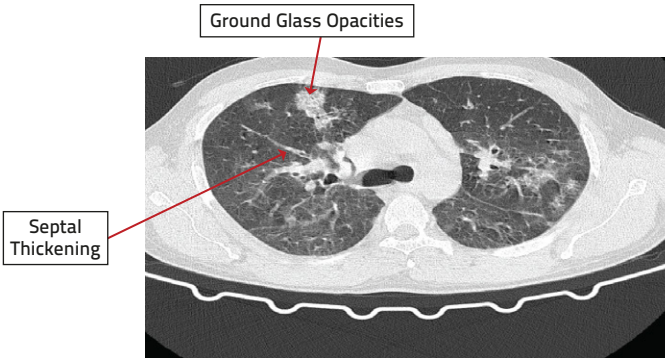
- Bilateral Patchy Non-homogenous Opacities

CT Thorax showed:

- Bilateral lungs showed multiple patchy ground-glass density airspace opacities with reticular septal thickening, joining into denser consolidations in both perihilar and peripheral distribution.
- Sparing of the lingula, middle lobe, and basal segments of the bilateral lower lobes.
- The clinical presentation of shortness of breath followed by recent onset fever, high blood counts of eosinophils, and similar past episodes responded well to steroids, featuring Chronic Eosinophilic Pneumonia (CEP).



Chest X-ray showing Bilateral Patchy Opacities (Anteroposterior View)



CT Thorax showing Bilateral Peripheral Ground Glass Opacities and Septal Thickening

ADMISSION COURSE

HRCT revealed features of pneumonia and given high Eosinophilia; it indicated Eosinophilic Pneumonia. The patient was treated with IV steroids, nebulized bronchodilators, and other supportive care.

With the above treatment, the condition significantly improved. He was advised of a Bronchoscopy and lavage to assess Alveolar Eosinophils to confirm the diagnosis of Eosinophilic pneumonia, but the patient refused.

At discharge, the eosinophil count was reduced to 0.2% from 47.1% two days after steroids, which was more evidence of diagnosing eosinophilic pneumonia.

The patient was discharged in a stable condition once afebrile with a reduced wheeze. He was advised for a follow-up after a week.

With the above treatment, he significantly improved, and his Peripheral Blood Eosinophilia became normal. His follow-up x-ray after one week showed clearance of opacities.

DISCUSSION

Eosinophilic Pneumonia (EP) is a rare disorder comprising several heterogeneous diseases. There are two main types of EP: Acute Eosinophilic Pneumonia (AEP) and Chronic Eosinophilic Pneumonia (CEP). In both types, the presence of eosinophils in the Lung Tissue and Bronchoalveolar Lavage (BAL fluid) is necessary.

Chronic Eosinophilic Pneumonia (CEP) was first described by Carrington et al. in 1969 as an Idiopathic pulmonary disorder characterized by abnormal infiltrations of eosinophils in the lungs (1). The incidence of CEP among interstitial lung diseases (ILDs) was reported to be 0–2.7% in an ILD registry in Europe and 0.5–1.2% in an ILD registry in the US.

CEP is most seen between the ages 30 and 50, with women being twice as likely to develop this disease, but it can develop at any age, including childhood and old age (3). A close association between CEP and allergic diseases has been noted, and more than half of the patients with CEP have an allergic disease, such as bronchial asthma, atopic dermatitis, and allergic rhinitis. These allergic diseases can develop before and after CEP onset (4).

The current working criteria are as follows:

- Clinical symptoms (lasting > 2 weeks)
- Abnormal chest radiographic findings
- Eosinophilia detected in BAL (usually > 25%), blood eosinophilia, and/or evident eosinophil infiltration in the lungs
- Exclusion of other known eosinophilic pneumonias such as drug pneumonia, parasitic infection, ABPA, and EGPA (5)

The treatment of CEP is oral steroid administration to be started at 30mg/day and tapered over 6-12 months based on clinical response (1).

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Diagnostic Insights and Management Approaches for Salivary Gland Tumour: Pleomorphic Adenoma

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INTRODUCTION

Pleomorphic adenoma (PA) (or benign mixed tumor), is the most common benign neoplasm found in salivary glands, constituting 45-75% of all tumors of the salivary gland (1). The annual incidence is approximately two to three and a half cases per 100,000 population, with a higher prevalence in females (1). This localized tumor exhibits pleomorphic or mixed epithelial features and is intricately composed of mucoid, myxoid, and chondroid masses (2). While it is commonly found in the parotid glands, it can also occur in various locations such as the hard and soft palate, as well as the salivary glands of the upper lip, cheek, tongue, and floor of the mouth (2). Diagnosing PA is a complex task, requiring both tissue sampling and radiographic studies due to its rarity and morphological diversity (1). Given its potential for malignancy, aggressive treatment is essential, especially for primary and recurrent mixed tumors (3). The cornerstone of this approach is the surgical excision of the tumor mass, with utmost care taken to preserve the facial nerve (3).

This clinical article explores a comprehensive approach for the care of patients with PA, emphasizing diagnostic strategies, surgical interventions, and postoperative considerations.

RISK FACTORS OF PA

PA can occur at any age; however, it is more common among young and middle-aged adults, typically ranging from 30 to 60 years of age (1,4). While the specific cause of this tumor remains largely elusive, several associations have been established, including (4):

- Radiation
- Simian virus 40 (SV 40)
- Tobacco
- Exposure to chemicals
- Chromosomal aberration of 8q12 and 12q15
- Prior head and neck irradiation

DIAGNOSTIC STRATEGIES FOR PA

PA can grow into extensive sizes if left untreated and hence needs to be diagnosed early (4). The diagnosis involves both tissue sampling and radiographic studies, as illustrated in Figure 1 (5). Imaging plays a significant role in the staging process, offering essential information for accurately localizing salivary gland tumors (e.g., in superficial and deep lobes) and distinguishing between benign and malignant conditions (5).

Approaches to Diagnosing PA

Aspect/Modality	Imaging Findings/Characteristics
Ultrasound	• Appears hypoechoic in texture (5). Well-defined borders with lobules, with or without posterior acoustic enhancement (5).
Computed Tomography (CT) Scan	• Appears as a globular mass with smoothly marginated or lobulated homogeneous soft tissue density (5). Larger masses may exhibit necrosis (5). • Larger tumors show less pronounced and delayed enhancement, while smaller tumors have early homogeneous significant enhancement (5).
Magnetic Resonance Imaging (MRI)	• Method of choice for salivary gland cancers (5). Smaller masses appear well-circumscribed and homogeneous, while larger tumors appear heterogeneous (5). • Helpful in differentiating recurrence from post-treatment changes (5). • Regular pre-contrast MRI is crucial for precise localization and staging (5). • Post-contrast short tau inversion recovery (STIR) images - Aid in defining perineural dissemination in cases of malignant transformation (5).
Fine-Needle Aspiration Cytology (FNAC)	• Primary diagnostic tool for parotid gland lesions (5). Helps in separating benign from malignant tumors (5). • FNA has a sensitivity of about 90% for identifying tumor malignancy (5). While core needle biopsy (more invasive) has a diagnosis accuracy of about 97% (5).
Immunohistochemical Markers	• Positive reactions include calponin, cluster of differentiation 9 (CD9), glial fibrillary acidic protein (GFAP), Mcl-2, metastasis suppressor gene (NM23), p63, S-100, smooth muscle actin (SMA), SRY-box transcription factor 10 (SOX10), and Pleomorphic adenoma gene 1 (PLAG1) (5).

Figure 1: Diagnostic Modalities in PA Assessment.

TREATMENT FOR PA

Managing PA poses a challenge and necessitates centralized care (6). If left untreated, it can progress to several complications, including enlargement to giant proportions and malignancy (7). Surgical excision with adequate margins of tumor-free tissue is the primary and most preferred method of addressing the mass (5). The surgeon should examine the tumor's size, location, vascularity, malignancy, and proximity to critical structures such as the oropharyngeal airway, neck, and vascular bundle while deciding on the best surgical strategy (5).

• EXTRACAPSULAR DISSECTION

Extracapsular dissection (ECD), also known as partial parotidectomy (PP), is a relatively newer method involving meticulous tumor dissection without the necessity of formal gland excision, and it has gained popularity in recent years (8,9). A recent meta-analysis indicates that ECD may serve as a viable alternative for treating unilateral benign parotid tumors of the superficial lobe, as long as the tumor is less than 4 cm in diameter and does not impact the facial nerve (5). A study comparing the effectiveness of ECD with superficial parotidectomy (SP) for PA of the parotid gland was conducted (10). The findings suggest that ECD could be considered the preferred treatment for PA situated in the superficial part of the parotid gland, as this technique demonstrates comparable effectiveness with fewer side effects than SP (10).

• SUPERFICIAL PAROTIDECTOMY (SP) AND PARTIAL SUPERFICIAL PAROTIDECTOMY (PSP)

SP involves excising all the parts of the gland situated superficially or laterally to the facial nerve (7). In cases where a PA affects the superficial parotid gland lobe, a SP with facial nerve preservation is conducted (5). This not only shortens the surgery duration but also diminishes the risk of facial nerve damage by minimizing the dissection of its branches (5).

An alternative approach, termed PSP, has been proposed where the tumor is removed along with a normal margin of parotid tissue, and the facial nerve is dissected only in the tumor's vicinity (11). Numerous studies have investigated various parotidectomy surgeries (7). One such study done by Stathopolous et al affirms that favorable outcomes, including a low recurrence rate and minimal risk of facial nerve weakness, can be achieved with less aggressive operations like PSP than traditional SP (7).

Similarly, a meta-analysis involving 11 studies and 1272 patients indicated no significant difference in tumor recurrence between partial and superficial partial parotidectomies (7). Moreover, no differences were noted in the occurrence of permanent facial nerve paralysis, salivary fistula, great auricular nerve analgesia, or hematoma between the two groups (7).

• TOTAL PAROTIDECTOMY (TP)

If malignancies affect the deep lobe, a TP is performed; they may grow medially and involve the parapharyngeal space (5). TP entails the complete removal of the deep part of the parotid gland (7). Simple enucleation of PA is associated with high recurrence rates ranging from 8% to 45%, a risk significantly reduced to less than 5% with SP even lower to 0.4% with TP (5).

• POSTOPERATIVE RADIATION THERAPY (PORT)

PORT is suggested as a treatment for PA in cases where surgery is unlikely to completely eliminate the disease, in situations involving facial nerve involvement, history of multiple recurrences, and elderly patients who are considered poor surgical candidates (11). The management philosophy has been to provide PORT to patients with close or positive margins, aiming to reduce the risk of local failure and mitigate the consequences of additional treatment on both oncologic and functional outcomes (12). In a study by Patel et al., the evaluation of locoregional control and treatment toxicity in PA patients who underwent resection with close or positive margins, followed by PORT, demonstrated excellent long-term locoregional control with low morbidity (12).

• TREATING RECURRENT PLEOMORPHIC ADENOMA (RPA)

The risk of recurrence was found to be correlated with tumor site, age at diagnosis, and margin status (5). In cases of recurrent PA, which can occur in upto 23% of instances, a second surgery is recommended for effective local control (11). However, treating RPA remains a formidable challenge, with some tumors proving to be incurable (6). The occurrence of satellite nodules and pseudopodia in PA may result from an incomplete tumor capsule, potentially leading to residual disease, especially after less extensive procedures like enucleation (6). If the capsule ruptures, there is a significant 14- to 21-fold increase in the risk of recurrences (6).

A study was conducted with a total of 49 patients who presented with at least 1 recurrence (13). The findings revealed that, for patients with RPA, the inclusion of adjuvant radiation therapy after surgery is associated with a noteworthy reduction in the risk of subsequent tumor (13,14).

Key Highlights

- Pleomorphic adenoma (PA) is the most common benign salivary gland neoplasm (14). It progresses slowly and, left untreated, can produce significant morbidity and, rarely, death (14).
- Accurate diagnosis combines imaging and fine-needle aspiration cytology, guiding therapeutic decisions and minimizing unnecessary surgeries (5).
- Currently, the surgical approach for PA is mainly based on the size, location, and mobility of the tumor (8). Extracapsular dissection, partial superficial parotidectomy, and superficial parotidectomy or total parotidectomy are among the recommended techniques (8).
- Recurrent pleomorphic adenoma (RPA) poses challenges; a second surgery is often recommended, with adjuvant radiation for improved local control (11).

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An Extremely Rare Injury of Bilateral Anterior Dislocation of the Shoulder during Breaststroke Swimming treated successfully at Aster Cedars Hospital and Clinic, Jebel Ali

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Orthopaedics (Specialist)

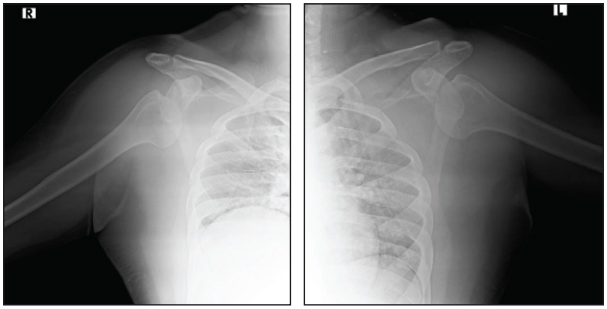
PRESENTATION

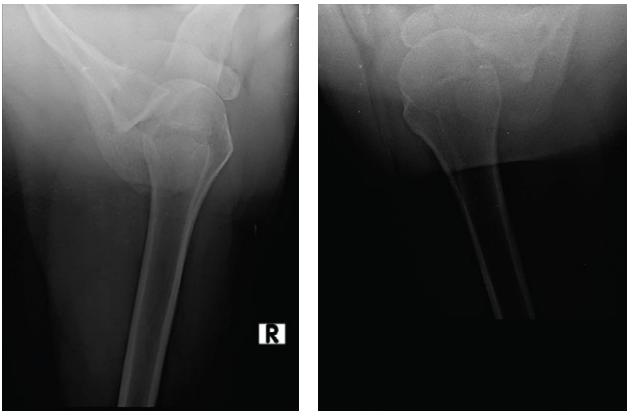
- 32 year old male
- No medical history
- No family history of medical illness
- Admitted with –
  - Severe pain and deformity of both shoulders
  - Mechanism of injury - He dove into a swimming pool and suddenly felt severe pain in his left shoulder, followed by right shoulder pain when he tried to drift back to the surface.

FINDINGS

During Examination:

- Both upper extremities were in an attitude of external rotation and abduction.
- Laterally sulcus sign was present with an inability to palpate greater tuberosity below the acromion on both sides. The Dugas sign was positive on both sides. Movements were painful and restricted on both sides. There were no signs of generalised ligamentous laxity.
- Antero-posterior and axial views of both shoulders showed an empty glenoid cavity with the humeral head below the coracoid process without any associated features.





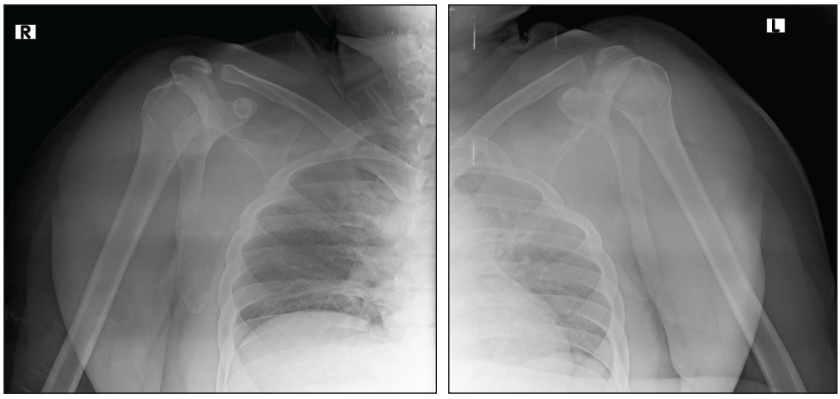
Pre-operative X-ray Images

DURING PROCEDURE

- Dislocation was reduced by Kocher's manoeuvre under general anaesthesia, first on one side, followed by the other.
- Reduction was secured in adduction and internal rotation by shoulder immobilizers.
- Post-reduction radiographs had a concentric reduction of both shoulder joints.

POST PROCEDURE

The patient was discharged from the hospital with both shoulders immobilised in slings. During immobilisation, he was advised to move the elbow, keeping the shoulder in adduction and internal rotation for personal hygiene and feeding purposes. The slings were discarded at 3 weeks, after which the full range of movement of shoulder joints was started.



Post-operative X-ray images

DISCUSSION

Bilateral shoulder dislocations are rare and almost always posterior. However, bilateral anterior shoulder dislocation is very rare. A literature review revealed about 30 reports of bilateral anterior dislocations, 15 of which were fracture dislocations. Most of them were due to violent trauma or electrocution; the remaining few were attributed to epileptic or hypoglycemic seizures. Sports injuries, seizures, electrical shock, electroconvulsive therapy, drug overdose, neuromuscular disorders, and psychiatric disturbances have been implicated.

The first case of bilateral anterior dislocation of the shoulder during backstroke swimming was reported in the Journal of Orthopaedics and Traumatology in 2012 by F Dilmi. However, in this case, dislocation happened during breaststroke swimming, making this an extremely rare injury. The dislocation usually occurs when the swimmer has the arm in the cocked position associated with hyper- extension of the shoulders. The force can be strong enough to rupture the anterior capsule and glenohumeral ligament complex, resulting in anteroinferior dislocation. Delayed diagnosis is not uncommon in bilateral shoulder dislocations resulting from electric shock or trauma. Surgery is reserved for recurrent cases, mostly seen in patients < 40 years of age.

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The Impact of Uterine Fibroids on Pregnancy: Complications and Clinical Insights

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INTRODUCTION

Fibroids are common benign uterine tumors in pregnancy, with a prevalence varying between 1.6% and 10.7% depending on the trimester (1,2). While most fibroids are asymptomatic, they can cause antepartum haemorrhage, abdominal pain, preterm labour, malpresentation, and postpartum haemorrhage (3). Physical examination and ultrasound are commonly used for diagnosing fibroids during pregnancy; however, they may not always accurately detect all cases (3). Conservative management is typically recommended for most cases of fibroids, however, in the event of complications arising after childbirth, surgery may be considered as an alternative option (1).

This article reviews the association between fibroids and pregnancy outcomes and discusses the diagnosis and management strategies for pregnancy complications due to fibroids.

TYPES OF FIBROIDS

Fibroids can be located in the body of the uterus, cervix, or broad ligament and are classified into three main types based on their location in the uterus (4). In addition to these three primary types, there are variations called pedunculated fibroids and cervical fibroids (4).

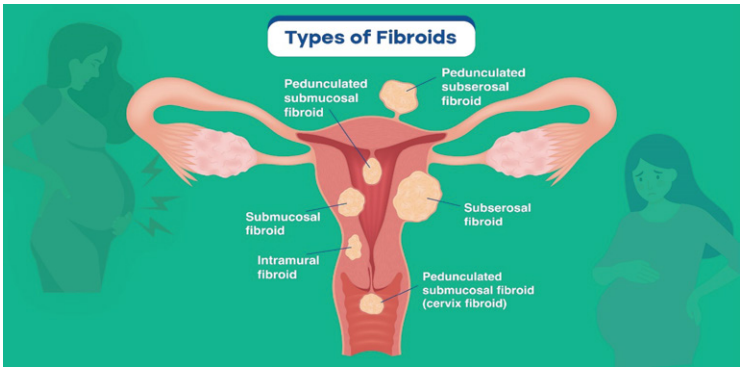

Figure 1: Different Types of Fibroids in Women

- **Intramural Fibroids** - These types of fibroids develop within the uterine wall of the uterus and frequently lead to symptoms such as abnormal bleeding, pelvic discomfort or pressure, and frequent urination (4).
- **Submucosal Fibroids** - These fibroids protrude into the uterine cavity and are associated with symptoms like irregular bleeding, miscarriages, and difficulties in conceiving (4).
- **Subserosal Fibroids** - These extend outward from the surface of the uterus and usually have less noticeable symptoms compared to menstrual bleeding but may impact pelvic comfort (4).
- **Pedunculated Fibroids** - Pedunculated subserosal fibroids, which have a stalk, typically have mild symptoms unless they reach a large size (4). On the other hand, pedunculated submucosal fibroids, also with a stalk, can lead to significant symptoms and are often associated with infertility (4).
- **Broad Ligament Fibroids** - Broad ligament fibroids, located in the broad ligament, can contribute to the rotation of the uterus and may cause complications during pregnancy or surgical procedures (4).

THE EFFECT OF PREGNANCY ON FIBROIDS

Approximately 10-30% of women with fibroids experience complications during pregnancy (4). These complications can include miscarriage, cesarean section, premature labor, malpresentation of the fetus, and postpartum hemorrhage (5). In some cases, less common complications may arise such as pelvic pain due to degeneration of the fibroid (4). Additionally, there have been reports of low Apgar scores in newborns from mothers with fibroids and rare occurrences of renal failure, fetal limb anomalies, and hypercalcemia (5). However, these complications are more likely to occur when the volume of the fibroids exceeds 200 cm^3 compared to smaller volumes below 100 cm^3 (4).

MATERNAL OUTCOMES

• BLEEDING IN EARLY PREGNANCY

The risk of bleeding can vary depending on the location of the fibroid (6). If the placenta is implanted close to the fibroid, there is a significantly higher risk of bleeding during early pregnancy compared to when there is no contact between the placenta and the fibroid (6). Fibroids can also cause post-delivery bleeding by interfering with muscle fiber restoration, which affects uterine contractility (6).

• PRETERM BIRTH

Preterm birth is a commonly reported negative outcome of pregnancy among women with fibroids (7). In a meta-analysis examining the relationship between uterine fibroids and preterm birth risk, several studies were analyzed (7). These studies included 276,172 pregnancies that underwent obstetric ultrasound assessment to determine the presence or absence of fibroids (8). The analysis revealed that women with fibroids tended to be older (mean difference = 2.40 years) and had an increased risk of preterm birth before 37 weeks (Reference Ratio (RR): 1.43,

95% CI: 1.27–1.60), at 34 weeks (RR: 1.79, 95% CI: 1.32–2.42), at 32 weeks (RR: 1.94, 95% CI: 1.33–2.85), and at 28 weeks (RR:2 .17, 95% CI: 1.48–3.17) compared to those without fibroids (P<0.01) (9). The risk of late, very late, and preterm birth was found to be comparable (9).

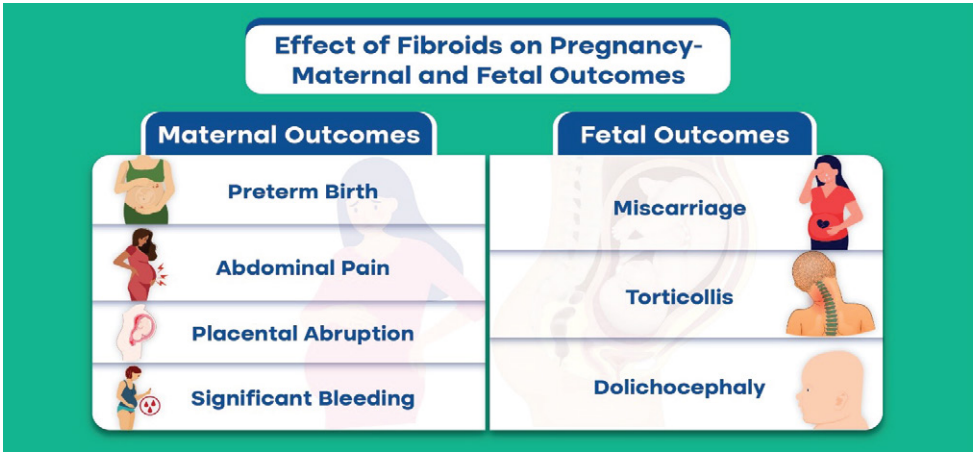

Figure 2: Maternal and Fetal Outcomes in Women with Fibroids during Pregnancy

• CAESAREAN SECTION

According to a study by Klatsky et al., cesarean section delivery rates were higher in women with fibroids compared to those without (48.8% vs. 13.3%) (10). In a retrospective study conducted by Stout et al., it was found that women with leiomyomas had an increased likelihood of needing a cesarean delivery even when excluding other factors such as placenta previa and breech presentation (33.1% vs 24.21%, Adjusted Odds Ratio [AdjOR] 1.2 [95% CI: 1.10-1.30]) (11,12). Another prospective cohort study called the "Right from the Start Study" examined whether women with uniform ultrasound-detected leiomyomas were at higher risk for cesarean birth without any specific indication for it during pregnancy's first trimester ultrasounds (11,13). The results showed that women with leiomyomas had a 27% increased risk of having a cesarean birth compared to those without leiomyomas (11,13).

OTHER COMPLICATIONS

Abdominal pain is a prevalent complication associated with fibroids during pregnancy (4). It becomes more noticeable when the fibroids exceed a diameter of 5 cm, causing pronounced discomfort in the second and third trimesters (14,15). This pain often occurs due to red degeneration of fibroids or torsion of a pedunculated fibroid, which leads to the release of prostaglandins from cell damage (4). In addition to pain, fibroids can also cause pressure symptoms (14).

Placental abruption is another potential complication (4). Large fibroids located near the placental site increase the risk by reducing blood flow and causing ischemic damage (4). Fibroids have also been shown to double the risk for placenta previa during pregnancy even after considering prior uterine surgery (4).

FOETAL OUTCOMES

• MISCARRIAGE

According to a study by Klatsky et al., women with uterine fibroids have a higher risk of experiencing miscarriages compared to those without fibroids (10,11). This study also included women who underwent assisted reproductive technology (ART) (10,11). The location of the fibroids also influences pregnancy outcomes (11). Submucosal and intramural fibroids are associated with higher rates of spontaneous abortion and lower rates of live births, while subserosal fibroids have no significant impact (4). Having multiple fibroids may further increase the rate of miscarriage (16).

The mechanism by which fibroids cause spontaneous miscarriage is not fully understood (4). However, several factors have been implicated including increased uterine irritability and contractility, the compressive effect of fibroids on the uterus, and potential compromise to the blood supply of the developing placenta and fetus (4).

OTHER FETAL OUTCOMES

In rare cases, large submucosal fibroids may be linked to fetal anomalies due to their compressive effects (4). These anomalies can include limb reduction defects, dolichocephaly, and torticollis (4). Furthermore, multiple fibroids, large-sized fibroid tumors (> 5 cm), and lower segment location of the uterus are identified as individual risk factors for fetal malpresentation (4).

MANAGEMENT OF FIBROIDS IN PREGNANCY

The key objectives in uterine fibroid management include enhancing symptom relief, reducing fibroid size maintaining the reduced size, preserving fertility when desired, and preventing further damage to the fetus (19).

• PAIN MANAGEMENT

Pain arising from fibroids during pregnancy is typically managed through conservative approaches, such as recommending bed rest, ensuring adequate hydration, and administering analgesic medications (4). Careful consideration is advised when contemplating the use of prostaglandin synthase inhibitors, such as nonsteroidal anti-inflammatory drugs, especially during the third trimester (4). Prolonged use, exceeding 48 hours, has been linked to potential adverse effects for both the developing fetus and the newborn, including early closure of the fetal ductus arteriosus, pulmonary hypertension, necrotizing enterocolitis, intracranial hemorrhage, or oligohydramnios (4).

In rare instances where severe pain persists, additional measures for pain management may be warranted (4). These may encompass narcotic analgesia, epidural analgesia, or surgical interventions like myomectomy (4).

• MYOMECTOMY

Myomectomy can be performed using laparotomy, laparoscopy, hysteroscopy, or a combination of these techniques, based on the number, size, and location of fibroids (4). Surgical treatment of fibroids during the first half of pregnancy is uncommon (4). However, studies have shown that

antepartum myomectomy can be safely carried out during the first and second trimesters if necessary (2). Indications for myomectomy during pregnancy include persistent pain caused by a degenerating subserosal or pedunculated fibroid, a large or rapidly growing fibroid, or any fibroid larger than 5 cm located in the lower uterine segment(2).

However, performing myomectomy during pregnancy increases the likelihood of having a cesarean section due to concerns about uterine rupture (20). While not all studies support this notion, most experts agree that it is best to avoid performing myomectomy during a cesarean section due to the associated risks (19). In cases of severe bleeding during myomectomy, interventions such as blood transfusion, uterine artery ligation, or postpartum hysterectomy may be necessary (20). It is generally advised to avoid performing a myomectomy during cesarean delivery to prevent severe hemorrhage (20). However, pedunculated subserosal fibroids can safely be removed during a cesarean delivery without an increased risk of bleeding (20).

• OTHER TREATMENT METHODS

Uterine artery embolization (UAE) is a commonly offered conservative option for women experiencing symptomatic uterine fibroids (1). This procedure entails the introduction of an occlusive agent into the uterine arteries, typically carried out by interventional radiologists (1). UAE is characterized by its minimally invasive nature, allowing it to be performed with the patient awake and has a swift recovery time (1). Surgical interventions may yield more favorable outcomes for single submucosal or subserosal fibroids compared to UAE but long-term data is needed to properly assess the risks and benefits associated with each treatment option (1).

Key Highlights

- Fibroids, also known as leiomyomas and myomas, are common benign pelvic tumors that affect a significant percentage of women, particularly as they age (1).
- Complications related to fibroids during pregnancy are experienced by 10-30% of women with fibroids (2).
- Management of fibroids during pregnancy involves conservative approaches to alleviate pain, including bed rest, hydration, and analgesic medications (5).
- Myomectomy and uterine artery embolization are potential interventions, with careful consideration of their timing and potential risks (1,5).

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Dr. Shiba Hamza
Radiology (Specialist)

A complex case of Intestinal Malrotation treated successfully with Diagnostic Laparoscopy and Reduction at Aster Hospital, Al Qusais

PRESENTATION

- 64 year old male
- Medical history of constipation and hypertension
- Seen by multiple specialists with no improvement, referred to Aster for further management
- No family history of medical illness
- Admitted with:
  - Abdominal discomfort with watery, non-bloody vomiting
  - Bloating with loss of appetite for 3 days

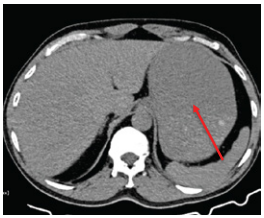
FINDINGS

During Examination:

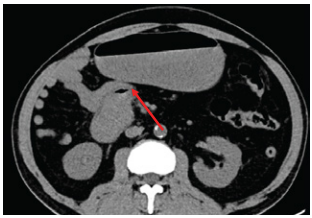
- Abdomen - soft, mildly distended
- Hyperactive bowel sound
- Mild tenderness

CT Abdomen showed:

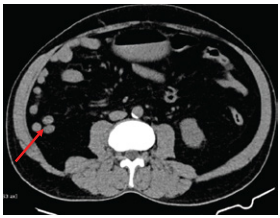
- Ladd's band – Dense adhesion at the Duodenojejunal flexure causing Intestinal Obstruction
- Midgut malrotation



Dilated Stomach



Corkscrew Movement causing Obstruction

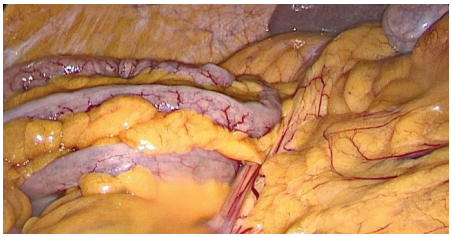


Collapsed Intestine

DURING PROCEDURE

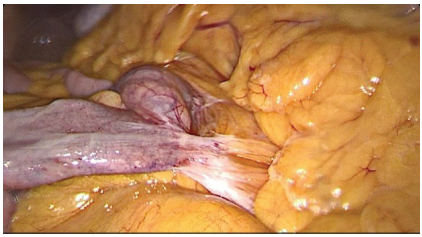
The patient underwent Diagnostic Laparoscopy and Reduction:

- After obtaining informed consent from the patient, the parts were painted and draped under aseptic conditions.
- The patient was placed in the supine position, and one 10 mm and three 5 mm ports were inserted (10 mm umbilical port for the camera, and 5 mm ports were the working ports).
- The duodenum was identified, and a dense band of adhesion was observed in the duodenojejunal flexure.
- The whole ascending colon, transverse, was displaced towards the left. And the small intestine was displaced towards the right side.
- The band was released.
- Hemostasis was attained, and the ports were removed.

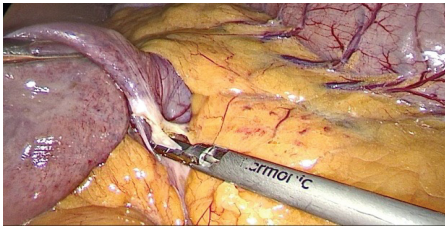


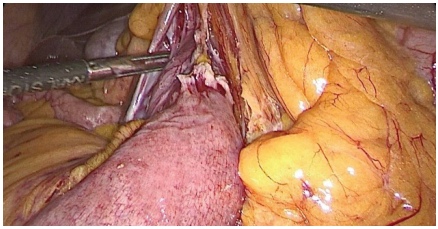
Intestinal Malrotation

(Image showing the Colon displacement towards the left and the whole of Small Intestine towards the right)



Adhesion at the DJ flexure causing Corkscrew movement and Obstruction





Adhesion Release

POST PROCEDURE

The patient tolerated the procedure well. He was stable in condition, and the post-operative period remained uneventful. The patient was discharged on post-op day 1.

DISCUSSION

Intestinal malrotation is a congenital abnormality occurring in 0.2 – 1% of the population, leading to a range of clinical challenges. Adult presentations comprise only 0.2–0.5% of all cases, leading to diagnostic challenges and worse adult outcomes.

Intestinal malrotation is a rare condition but is considered an essential cause of bowel obstruction in adults. Diagnosing malrotation after childhood is complicated and is usually not readily considered as the cause of intra-abdominal symptoms. The presentation is usually nonspecific, and this often leads to diagnostic and treatment delays with possible bowel ischemia and necrosis. Evidence of this portends a poor prognosis and death.

Therefore, a high index of suspicion needs to be maintained, and prompt surgical intervention must be considered to prevent an abdominal catastrophe and fatality. There are no reliable means of identifying which group of patients with intestinal malrotation will develop subsequent complications.

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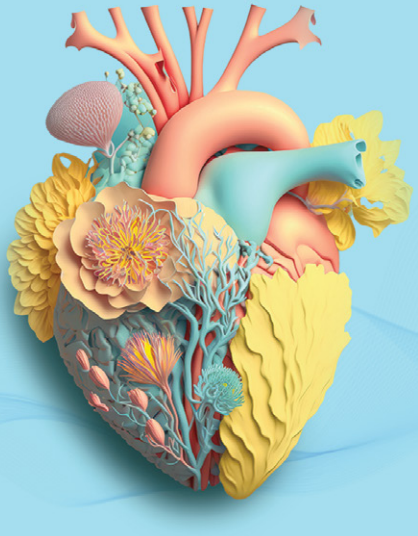

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