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ORIGINAL RESEARCH

Sonological and Clinical Assessment of Right Iliac Fossa Mass

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ABSTRACT

Background: The purpose of this research is to evaluate the clinical and ultrasound data related to the right iliac fossa mass to better understand its diagnostic and therapeutic value. While this research does look at masses in the right iliac fossa, it does not cover the full spectrum of disorders seen in gynaecological wards.

Material and Methods: From December 2021 to October 2022, this study was carried out in the department of surgery at KIMS, Narkat pallywith participants who met the inclusion and exclusion criteria. 32 patients participated in the trial. 32 patients were included in this study; 12 had appendicular masses, 10 had appendicular abscesses, 6 had ileocaecal Koch's, 3 had carcinoma caecum, and 1 had crohn's disease.

Results: Appendicular pathology, ileocaecal Koch's, Carcinoma Caecum, and Crohn's disease are the most common causes of a mass in the right iliac fossa. Appendicular masses are the most common form of right iliac mass, and typically respond well to conservative treatment without producing major morbidity. All surgically-treated ileo-caecal TB cases were successful. Patients with Crohn's disease treated surgically and afterwards with medication had good outcomes.

Conclusion: According to the results of this research, appendicular mass is the most common type of right iliac mass, and it responds well to conservative care. All surgically treated ileo-caecal TB cases improved. Crohn's cases treated surgically and afterwards with medication responded well.

Keywords: Sonological; clinical assessment; right iliac fossa mass.

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INTRODUCTION

Greek word "Cheir" (hand) ergon is where the word "surgery" comes from. Latin defines chirguria as "treatment of the diseased, injured, or deformity by yearly or instrumental operations," such as the excision of diseased body parts by cutting. "Chirugeon" is the term for the surgeon.[1,2] The abdomen has remained fascinating over time and presents an exciting diagnostic challenge. The "Temple of surprises," the "tomb of mysteries," and the "magic box of Pandora" are just a few of the many names that accurately characterised the mystery that it has held for surgeons from ancient times.[3-5]Even with advances in the realm of diagnostics, surprises still happen. One of the most satisfying diagnostic techniques a surgeon may do is a thorough examination of the abdomen. A good operation begins with a correct diagnosis, as Sir Hamilton Bailey famously put it.[6] Clinicians have always been fascinated by an abdominal mass. Most individuals who have surgery present with an abdominal mass.[7] When it comes to incidence of mass per abdomen, the right iliac fossa takes centre stage among the other abdominal quadrants. The goal of this investigation, despite being broad in scope, was to clarify some of the enigma surrounding a mass in the right iliac fossa, the mass

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itself serving as a diagnostic obstacle.[8] Other uncommon conditions include undescended kidney, undescended testis, complicated or uncomplicated ectopic pregnancy, intussusceptions, amoeboma, actinomycosis, Crohn's disease, parietal wall abscess, chondrosarcoma, desmoids tumour, secondaries, and aneurysms. Without using the "Penny in the slot" technique, a clinician can diagnose the common conditions met.[9,10]A clinical diagnosis is possible in most situations. For example, a quick history may suggest an appendiceal mass, while a prolonged, chronic history may suggest an inflammatory disorder such an ileocecal blockage or an inflammatory bowel disease like crohn's disease if diarrhoea and constipation are present.[11] Weight loss followed by rectal haemorrhage is indicative of cancer of the cecum. In addition, we can employ the appropriate investigations to arrive at a definitive diagnosis and provide the best care for the patient. The purpose of this research is to evaluate the diagnostic and therapeutic value of right iliac fossa masses, as well as the correlation between clinical and ultrasound results. Tumors in the right iliac fossa.[12,13] for example, are just one example of a condition not included in this study that affects women who are hospitalised and treated in gynaecological wards.

MATERIALS & METHODS

This study was carried out in the Department of surgery at KIMS, Narkatpally from December 2021 until October 2022 with participants who met the inclusion and exclusion criteria. In total, 32 patients took part in the investigation. This study included a total of 32 patients, 12 of whom had appendicular masses, 10 of whom had appendicular abscesses, 6 of whom had ileocaecal Koch's disease, 3 of whom had carcinoma caecum, and 1 of whom had crohn's disease.

Inclusion Criteria

1. Patients older than the age of 18 are included.
2. Patients who had a mass in the right iliac area upon admission are included.
3. It also contains instances that were unintentionally uncovered through inspection and research.

Exclusion Criteria

1. It does not include any gynecological issues.
2. It excludes the mass from other areas that is pushing into the right iliac fossa.
3. It excludes right iliac fossa parietal wall swellings.

A sampling technique was used to select cases that had a mass in the right iliac fossa before they were admitted, examined, and given a range of treatments before being evaluated. The cases were investigated by conducting in-depth histories, comprehensive physical examinations, in-depth laboratory investigations, and ultrasonological tests.

RESULTS

This study comprised a total of 32 patients, 12 of whom had appendicular masses, 10 of whom had appendicular abscesses, 6 of whom had ileocaecal Koch's disease, 3 of whom had carcinoma caecum, and 1 of whom had crohn's disease. All of the patients were Caucasian [Table 1].

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Table1: Allocation of ailment

Sr. No	Disease Distribution	Number of patients
1	Mass of the Appendix	12
2	A peritoneal abscess	10
3	Appendicular Abscess and a Mass in the Appendix	6
4	Caecum Carcinoma	3
5	Crohns Disease	1
	Grand Total	32

Table 2: Sex incidence

Sr. no	Diagnosis	Females	Male	Grand Total
1	Mass of the Appendix	5	7	12
2	A peritoneal abscess	2	8	10
3	Appendicular Abscess and a Mass in the Appendix	1	5	6
4	Caecum Carcinoma	1	2	3
5	Crohns Disease	0	1	1
	Grand Total	09	23	32

Table 3: Age incidence

Age Group	10-19 years	20-29 years	30-39 years	40-49 years	50-59 years	60-70 years
Appendicular mass	0.0%	13.3%	27.5%	26.3%	22.2%	8.2%
Appendicular abscess	8.3%	0.1%	17.3 %	16.3 %	17.3 %	35.8%
AM+AA	0.6%	32.8 %	36.7 %	0.6%	34.4 %	0.1%
ICTB	0.2%	12.6 %	76.1 %	0.8%	0.2%	13.6%
CA CAECUM	0.7%	0.1%	0.2%	18.1%	39.1%	41.1%
Crohns Disease	0.8%	0.7%	0.2%	13.4%	0.4%	0.6%

Table- 4: Depending on your age, your appendicular mass

Age Group	10-19 years	20-29 years	30-39 years	40-49 years	50-59 years	60-70 Years
Appendicular mass	0.1%	15.1%	29.2%	27.8%	22.1%	8.2%

Table 5: Where the appendicular abscess is located

Age Group	10-19 years	20-29 years	30-39 years	40-49 years	50-59 years	60-70 years
Appendicula r abscess	8.2%	0.1%	19.1%	19.1%	17.3%	37.1%

Table 6: Age distribution of the abscess and appendicular mass

Age Group	10-19 years	20-29 years	30-39 years	40-49 years	50-59 years	60-70 years
AM+AA	0.3%	32.2%	32.1%	0.1%	34.4%	0.8%

Table 7: Ileocaecal tuberculosis age distribution

Age Group (In years)	10-19	20-29	30-39	40-49	50-59	60-70
ICTB	0.2%	12.3%	74.0%	0.2%	0.1%	13.2%

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Table 8: Age distribution of ca caecum

Age Group (In years)	10-19	20-29	30-39	40-49	50-59	60-70
CA CAECUM	0.2%	0.1%	0.3%	21.3%	41.%	39.0%

Table 9: Age distribution of crohns disease

Age Group (In years)	10-19	20-29	30-39	40-49	50-59	60-70
Crohns Disease	0.1%	0.2%	0.1%	11.9%	0.3%	0.4%

Table 10: Distribution of diseases based on clinical diagnosis

Mass in the appendix	29	93%
Tuberculosis of the ileum	3	7%
Total	32	100%

Table 11: Based on ultrasound diagnosis, the distribution of diseases

1.	Standard Study	1
2.	Mass In The Appendix	12
3.	Abscess in the appendix	3
4.	Appendicular abscess and a mass in the appendix	2
5.	TB ileocaecal	5
6.	Ca caecum	3
7.	Crohns disease	2
8.	Stricture, dilated loops, and inflammation	4
	Total	32

Table 12: Based on ct diagnosis, the distribution of the illness

For additional investigation of the right iliac fossa mass that was equivocal on ultrasound, CT was only performed in 32 individuals in our study.

	CT Diagnosis	Percentage
Standard Study	1	3.12%
Mass In The Appendix	1	3.12%
Abscess in the appendix	10	31.25%
Ictb	12	37.5%
Ca Caecum	6	18.75%
Crohns Disease	1	3.12%
Stricture, dilated loops, and inflammation	1	3.12%
Total	32	100%

Table 13: Pathology diagnoses and their distribution

	Diagnosis	%
mass in the appendix	12	33%
Abscess in the appendix	10	26 %
AM+AA	0	7%
ICTB	6	19%
CA CAECUM	3	12%
Crohns Disease	1	3%
Total	32	100%

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Difference between a Clinical and a Final Diagnosis

Appendicular mass and ileocaecal TB were both highly linked with their respective clinical diagnoses.

DISCUSSION

It was discovered that 12 of these patients had appendicular masses, 10 of these patients had appendicular abscesses, 6 of these patients had ileocaecal Koch's, 3 of these patients had cancer of the caecum, and 1 of these patients had crohn's disease. Only appendicular pathology is responsible for 59% of cases that manifest as a tumour in the right iliac fossa. The next three most prevalent causes of this symptom are Crohn's disease, Ileocaecal Koch's disease, and Carcinoma Caecum. The outcomes of this research indicate that the appendicular mass is the sort of mass that occurs more frequently in the region of the right iliac. As a result of this, the appendicular tumour reacts favourably to conservative treatment and does not result in any morbidity. In every case of ileocaecal tuberculosis for which surgical treatment was administered, the patient showed signs of a successful recovery. A favourable response was seen in cases of Crohn's disease that initially underwent surgical treatment and afterwards moved on to pharmaceutical therapy.According to the findings of a study that was carried out in 1993 by S. Nitecki from the department of surgery in Israel and E.S Garba and A.Ahmed22 from the department of surgery in Nigeria, acute appendicitis is the leading cause of acute abdomen that calls for surgical intervention. The formation of periappendicular mass was shown to be a complicating factor in between two and six percent of instances, according to the findings of the study.[14]The patients in a clinical trial that involved carcinoma of the cecum had an average age of 61 years, the ratio of men to females was 1:2.2, and the patients had been suffering symptoms for an average of one year. The study had 29 individuals.[15]Joseph F. Philadelphia is the one who carried out the research for the study. In another clinical research that was conducted at Johns Hopkins, the average age of the patients was 61, the ratio of male to female participants was 1.3:1, and the treatment lasted an average of seven and a half months. In addition, the ratio of male to female participants was 1.3:1. After having it histologically confirmed, the diagnosis of cancer cecum was given to 62 of the patients at Scott and White, according to the findings of an examination of the records that were kept by the medical facility. There were 37 male patients and 25 female patients among these 62 total individuals. When they were first diagnosed, most patients were 70 years old on average. Contrast-enhanced CT, as suggested by S. Nitecki's theory, is a more reliable way for discriminating between appendicular phlegmon and appendicular abscess than other diagnostic techniques.[16,17] In cases with an ambiguous presentation, which can be deceiving, ultrasound can play a role in determining the origin of the mass, as well as its nature and extension. This is a very helpful piece of information that may be used in the diagnostic process as well as the pre-operative examination of the mass.[18] In the course of our research, computed tomography was performed on twenty patients in order to provide more insight into the right iliac fossa mass in cases where ultrasonography provided no clear answers. CT's sensitivity in identifying the underlying pathology was 94%, as measured against the conclusive diagnosis.[19] Ultrasound plays a decisive role in the diagnosis of the right iliac fossa mass, as well as its pre-operative evaluation and management, in elderly patients who are unable to withstand procedures like colonoscopy, patients who are not willing for radiation exposure (barium studies), patients who cannot afford CT scanning, and patients who live in rural areas where CT scans are not available. Early patient assessment with ultrasound, effective treatment in terms of lowering morbidity, early surgical intervention wherever necessary, decreased hospital stay and cost of therapy, and early surgical intervention wherever necessary.[20,21]

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CONCLUSION

There are a variety of causes for vocal cord palsy based on a person's age, sex, gender, presence of systemic illness, and laterality. As a result, individuals who present with vocal cord palsy require a comprehensive approach to diagnosis and therapy.

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