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MESENTERIC LIPOSARCOMA: A CASE REPORT

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ABSTRACT

A 63YRS OLD FEMALE PATIENT CAME TO THE SURGICAL OPD WITH COMPLAINS OF ABDOMINAL SWELLING FOR ONE YEAR DURATION THAT WAS GRADUALLY PROGRESSIVE, MAINLY IN THE UPPER ABDOMEN. SHE ALSO COMPLAINED OF LOSS OF APPETITE. ABDOMINAL EXAMINATION REVEALED A DIFFUSE INTRAPERITONEAL MASS EXTENDING FROM THE EPIGASTRIUM UP TO THE UMBILICAL REGION. RADIOLOGICAL EXAMINATION CONFIRMED A HUGE INTRAPERITONEAL TUMOR DISPLACING BOWELLOOPS. AT LAPAROTOMY, APART FROM HUGE MASS ARISING FROM TRANSVERSE MESOCOLON, MULTIPLE SUCH MASSES WERE FOUND ON EITHER SIDES OF IT AND WERE EXCISED. HISTOPATHOLOGY REVEALED THEM TO BE WELL DIFFERENTIATED LIPOSARCOMA. PATIENT WAS THEN REFERRED TO ONCOLOGIST FOR FURTHER TREATMENT.

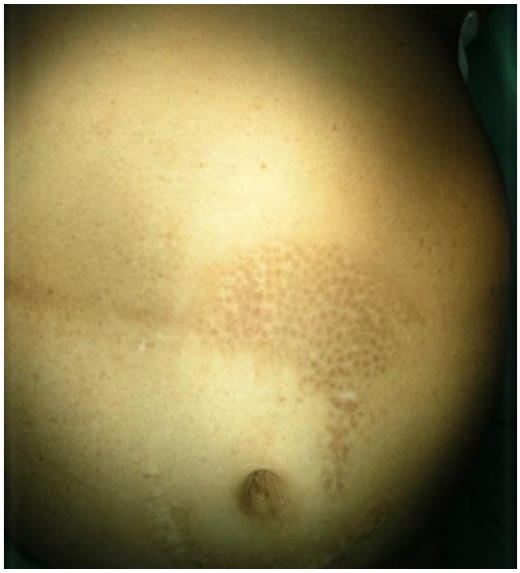
KEYWORDS:LIPOSARCOMA, MESENTERIC, WELL DIFFERENTIATED, MESOCOLIC

INTRODUCTION

LIPOSARCOMA IS ONE OF THE MOST COMMON SARCOMAS IN ADULT. THEY COMMONLY OCCUR IN LIMBS, RETRO PERITONEUM. THOSE ARISING FROM OTHER SITES ARE RARE. LIPOSARCOMA ARISING FROM MESENTERY IS EXTREMELY RARE. THERE IS YET NO SERIES ON SUCH CASES OF PRIMARY MESENTERIC LIPOSARCOMA, AS A SURGEON WILL ENCOUNTER ONLY A CASE OR TWO IN AN ENTIRE CAREER. WE ARE HEREBY REPORTING SUCH A CASE OF PRIMARY MESENTERIC LIPOSARCOMA.

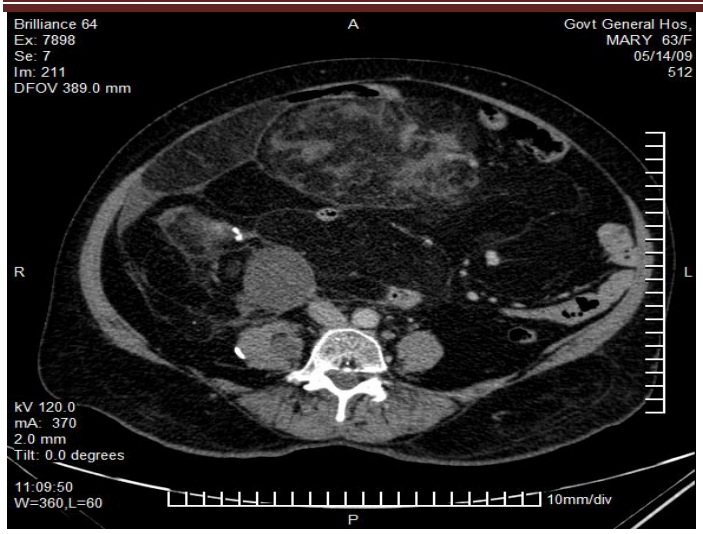
CASE REPORT

A 63 YEAR OLD LADY PRESENTED WITH COMPLAINTS OF ABDOMINAL DISTENSION FOR PAST 1 YEAR, GRADUALLY PROGRESSIVE, CONFINED TO UPPER ABDOMEN. SHE ALSO COMPLAINED OF EARLY SATIETY. THERE WERE NO OTHER COMPLAINTS. HER PAST HISTORY REVEALED HER TO BE A HYPERTENSIVE PATIENT ON REGULAR TREATMENT. SHE HAD UNDERGONE SURGERY FOR UMBILICAL HERNIA 3 YEARS AGO.



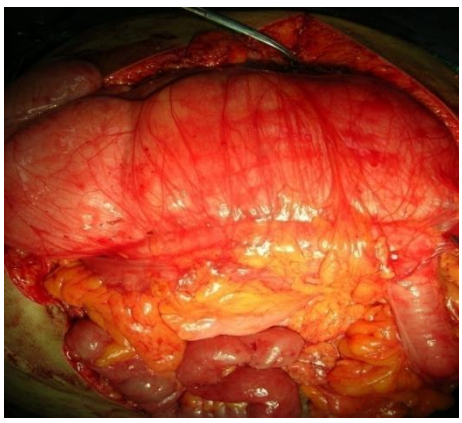
ON EXAMINATION, SHE WAS WELL PRESERVED, NOT ICTERIC, NOT PALE AND NO GENERALIZED LYMPHADENOPATHY. HER VITALS WERE STABLE.ABDOMINAL EXAMINATION REVEALED A DISTENDED ABDOMEN WITH A DIFFUSE FULLNESS IN EPIGASTRIUM EXTENDING UP TO UMBILICAL REGION. SMILEY SCAR OF PREVIOUS UMBILICAL HERNIA SURGERY WAS SEEN. ON PALPATION, ABDOMEN WAS SOFT, NOT WARM OR TENDER, POORLY DEFINED MASS OF 15X12CM PALPABLE IN EPIGASTRIC REGION, EXTENDING UP TO UMBILICAL REGION, SMOOTH SURFACE, MARGINS POORLY DEFINED, FIRM CONSISTENCY , FALLING FORWARD, NOT MOVING WITH RESPIRATION. NO OTHER MASS OR ORGANOMEGALY MADE OUT. RENAL ANGLES WERE FREE. PERCUSSION OVER THE MASS REVEALED A DULL NOTE. THERE WAS NO FREE FLUID IN ABDOMEN. RECTAL EXAMINATION WAS NORMAL.

AN ULTRA SONOGRAM OF ABDOMEN REVEALED A LARGE 12.5 X9.6 CM, UNIFORMLY ECHOGENIC LESION WITH UNCLEAR MARGINS IN MIDLINE, DISPLACING BOWEL LOOPS TO PERIPHERY. IT ALSO REVEALED A SIMPLE RIGHT RENAL CORTICAL CYST, SMALL RIGHT RENAL CALCULI AND MILD RIGHT HYDRONEPHROSIS.

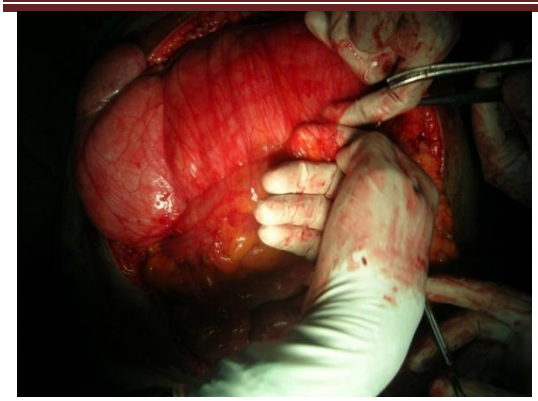


CECT OF ABDOMEN SHOWED A SPACE OCCUPYING LESION IN EPIGASTRIUM EXTENDING TO UMBILICAL REGION OF SIZE 16X16X10 CM DISPLACING THE BOWEL LOOPS, SUGGESTIVE OF A TERATOMA. HER COMPLETE BLOOD COUNTS, SUGAR, UREA AND CREATININE, LIVER FUNCTION TESTS WERE NORMAL. CHEST X-RAY AND ECG WERE NORMAL. UPPER GI ENDOSCOPY WAS NORMAL.

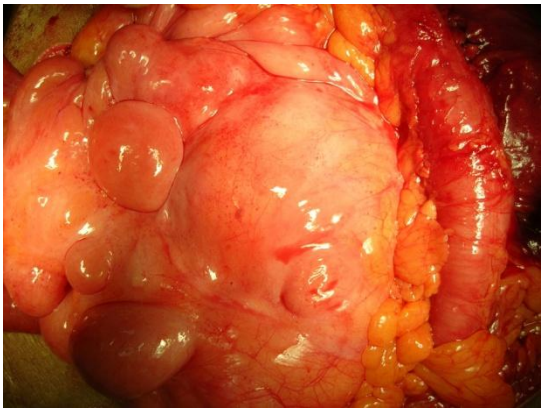
WITH A PROVISIONAL DIAGNOSIS OF A TERATOMA, LAPAROTOMY DONE THROUGH A GENEROUS MIDLINE INCISION AND PERITONEA L CAVITY EXPLORED. A HUGE 23X16X12 CM MASS FOUND IN THE LESSER SAC ATTACHED TO THE TRANSVERSE MESOCOLON. IT WAS WELL ENCAPSULATED AND HAD NO MAJOR VASCULAR ATTACHMENTS. THE MASS WAS EXCISED IN TOTE. FURTHER EXPLORATION OF ABDOMINAL CAVITY REVEALED MULTIPLE SUCH SMALL MASSES SCATTERED ON BOTH SIDES OF TRANSVERSE MESOCOLON. ALL THE MASSES WERE AWAY FROM BOWEL WALL, WITHOUT ANY ATTACHMENT TO MAJOR VASCULAR STRUCTURES AND WERE EXCISED.



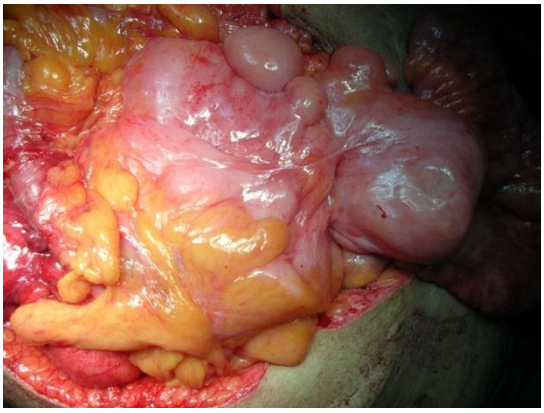
Mass seen in lesser sac



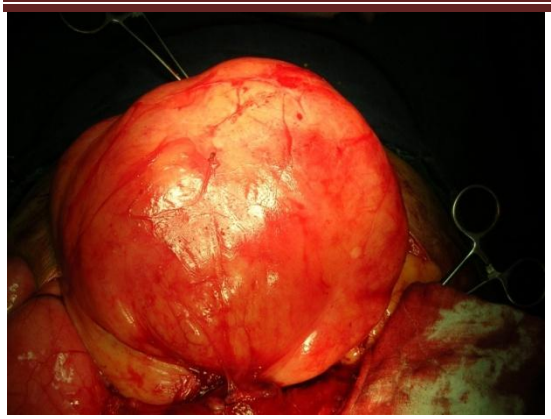
OPENING THE LESSER SAC



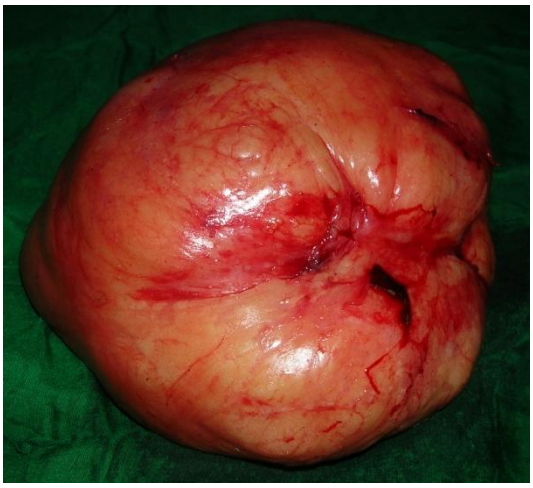
SUPERIOR SURFACE OF TRANSVERSE MESOCOLON SHOWING MULTIPLE MASSES



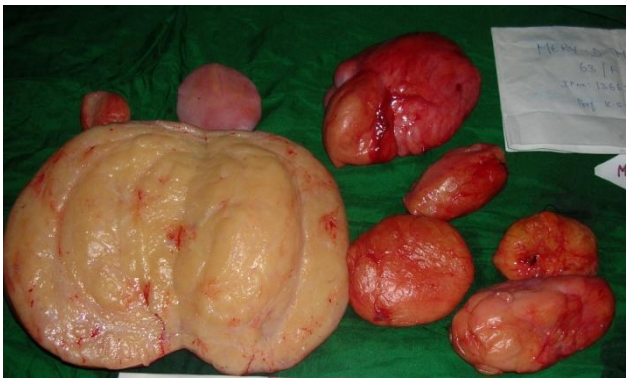
INFERIOR SURFACE OF TRANSVERSE MESOCOLON SHOWING MULTIPLE MASSES

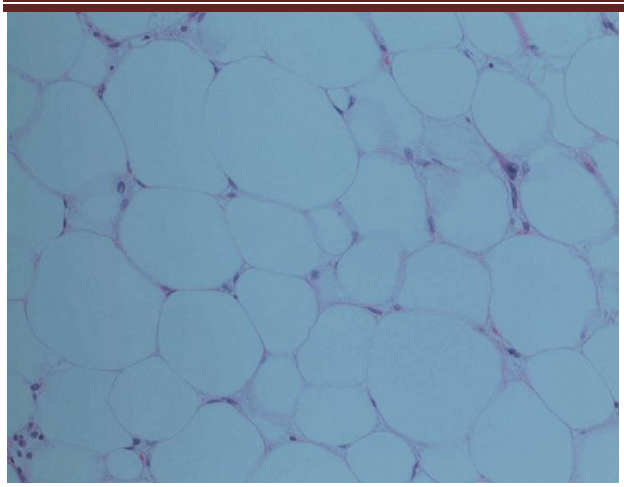


LARGEST MASS EXCISED



PATIENT HAD AN UNEVENTFUL POST-OPERATIVERECOVERY. HISTOPATHOLOGIC EXAMINATION OF THE EXCISED TISSUES REVEALED THEM TO BE WELL DIFFERENTIATED LIPOSARCOMA. PATIENT WAS REFERRED TO ONCOLOGIST FOR FURTHER TREATMENT.





MICROSCOPIC EXAMINATION OF SPECIMEN

DISCUSSION

LIPOSARCOMA IS ONE OF THE COMMONEST TUMORS OF THE ADULTS OCCURRING IN THIGH AND RETROPERITONEUM. HOWEVER, THOSE ARISING FROM MESENTERY OR MESOCOLON ARE EXTREMELY RARE. ONLY 20 CASES OF PRIMARY MESENTERIC LIPOSARCOMA HAVE BEEN REPORTED. WE ARE HEREBY REPORTING THIS CASE OF PRIMARY MESENTERIC LIPOSARCOMA FOR ITS RARE OCCURRENCE.

LIPOSARCOMA CONSTITUTES 20%OF ALL ADULT SARCOMAS. THOUGH A LIPOSARCOMA, IT DOESN'T ARISE FROM TISSUES RICH IN LIPOCYTES LIKE SUBCUTANEOUS TISSUE OR OMENTUM. IT IS MORE OF A MESENCHYMAL IN ORIGIN, AND IS COMMON IN THIGH AND RETRO PERITONEUM. LIPOSARCOMA CAN BE DIVIDED HISTOLOGICALLY INTO WELL DIFFERENTIATED, DEDIFFERENTIATED, MYXOID, ROUND CELL AND PLEOMORPHIC VARIETIES. OF THESE, WELL DIFFERENTIATED VARIETY HAS THE BEST PROGNOSIS.

PRIMARY MESENTERIC LIPOSARCOMA ARISING FROM MESENTERY OR MESOCOLON IS A VERY RARE CONDITION. PRIMARY MESENTERIC LIPOSARCOMA USUALLY OCCURS IN 5TH - 7TH DECADES, WITH A SLIGHT MALE PREPONDERANCE. OUR PATIENT WAS A FEMALE. IT IS A LOCALLY AGGRESSIVE 8: NON- METASTASIZING TUMOR. USUALLY PRESENTS AS DEEP SEATED MASSES THAT CAN GROW TO LARGE SIZES. IT IS GENERALLY LOCATED MORE NEAR THE ROOT OF MESENTERY THAN THE BOWEL.

MOST PATIENTS ARE USUALLY ASYMPTOMATIC. THERE MAY BE NON-SPECIFIC SYMPTOMS SUCH AS EARLY SATIETY, ABDOMINAL DISTENTION AND ANOREXIA. IT CAN CAUSE SUB ACUTE INTESTINAL OBSTRUCTION OR RARELY VOLVULUS. DISEASE PROGRESSION USUALLY LEADS TO DEATH AS A RESULT OF LOCAL UNCONTROLLED MASS EFFECT OR THE TUMOR MAY DEDIFFERENTIATE AND METASTASIZE.

DIAGNOSIS IS USUALLY INCIDENTAL, WHEN ABDOMEN IS IMAGED FOR NON-SPECIFIC SIGNS AND SYMPTOMS. ULTRASOUND OF THE ABDOMEN IS THE PREFERRED INITIAL MODALITY OF INVESTIGATION. IT HELPS TO LOCALIZE THE

LESION. THE MAIN PURPOSE OF PREOPERATIVE INVESTIGATION IS TO IDENTIFY THE RELATION WITH MAJOR NEUROVASCULAR STRUCTURES AND FOR METASTATIC WORK UP. CONTRAST ENHANCED CT SCAN IS THE INVESTIGATION OF CHOICE AS IT HELPS IN DEFINING THE RELATIONS OF TUMOR TO VESSELS, BOWEL AND OTHER STRUCTURES OF VITAL IMPORTANCE. 'STRADDLING SIGN' MAY BE SEEN IN CECT, WHICH IS NOTHING BUT THE PRESENCE OF BOWEL LOOPS BETWEEN THE TUMOR AND ABDOMINAL WALL INDICATING THEIR MESENTERIC ORIGIN. THIS SIGN HOWEVER, IS NOT SPECIFIC FOR MESENTERIC LIPOSARCOMA. MRI PROVIDES NO ADDITIONAL INFORMATION THAN THAT PROVIDED BY THE CECT, HENCE NOT NECESSARY IN ALL PATIENTS. VALUE OF PET-CT IS QUESTIONABLE. PRE-OPERATIVE FNAC HAS NEVER BEEN USED FOR DIAGNOSIS AS IT IS NEITHER SPECIFIC NOR SENSITIVE. HOWEVER, IT IS USEFUL IN DETECTING LOCAL RECURRENCE. PRE-OPERATIVE TRUCUT BIOPSY IS ALSO OF A QUESTIONABLE VALUE.

MAIN DIFFERENTIAL DIAGNOSIS OF TUMORS ARISING FROM THE MESENTERY IS MALIGNANT LYMPHOMA, LEIOMYOSARCOMA AND PELVIC LIPOMATOSIS. PRIMARY MESENTERIC LIPOSARCOMA REPRESENTS ONE OF THE RAREST FINDING IN A MESENTERIC TUMOR.

SURGERY IS THE ONLY MODALITY TO GIVE BEST POSSIBLE CHANCE OF CURE. CHEMOTHERAPY AND RADIOTHERAPY HAVE A VERY MINIMAL ROLE IN TREATMENT OF LIPOSARCOMA. TREATMENT OF PRIMARY MESENTERIC LIPOSARCOMA IS WIDE EXCISION WITH CLEAR MARGINS. THIS MAY EVEN MEAN RESECTION OF A PORTION OF BOWEL OF NEEDED. MOST CASES REPORTED ON MESENTERIC LIPOSARCOMA HAVE NECESSITATED REMOVAL OF INVOLVED PORTION OF BOWEL. BUT THIS WAS NOT NECESSARY IN OUR PATIENT. PROGNOSIS DEPENDS ON GRADE, DIFFERENTIATION AND MARGIN STATUS. SIZE AND LOCATION MAY ALSO DETERMINE PROGNOSIS.

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