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A CASE OF MULTIPLE JEJUNAL DIVERTICULA IN A PATIENT PRESENTING WITH SMALL BOWEL OBSTRUCTION – A RARE FINDING

KEY WORDS: JEJUNAL DIVERTICULOSIS, SMALL BOWEL OBSTRUCTION, RESECTION ANASTOMOSIS

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ABSTRACT

JEJUNAL DIVERTICULUM IS A RARE FINDING AND IN MOST OF THE CASES ARE ASYMPTOMATIC.MOSTLY PRESENTS AS AN SURPRISING FINDING DURING LAPAROTOMY AND ON AUTOPSY.CHRONIC NON-SPECIFIC PAIN ABDOMEN(1), UNEXPLAINED MALNUTRITION MAY SOMETIMES BE THE PRESENTING SYMPTOMS.BUT RARELY IT MAY PRESENT AS GASTROINTESTINAL HAEMORRHAGE, PERITONITIS,OBSTRUCTION.

WE PRESENT A 54 YR. OLD MAN DAILY LABOUR BY PROFESSION VISITED OUR EMERGENCY HERE AT B S MEDICAL COLLEGE WITH FEATURES OF SMALL BOWEL OBSTRUCTION.ON LAPAROTOMY ALONG WITH BAND OBSTRUCTION OF PROXIMAL ILEUM WITH UNHEALTHY SEGMENT WE NOTED JEJUNAL DIVERTICULA WHICH ARE MULTIPLE IN NUMBER AND DISTRIBUTED THROUGH OUT JEJUNAL LENGTH.DIVERTICULAS LEFT UNTREATED AS THEY WERE MULTIPLE AND NOT CAUSING ANY OBSTRUCTION.THE PATIENT IS DOING WELL IN 6 MONTHS FOLLOW-UP.

INTRODUCTION-

MULTIPLE JEJUNAL DIVERTICULOSIS IS A RARE FINDING WITH VARIED CLINICAL PRESENTATION RANGING FROM ENTIRELY ASYMPTOMATIC TO FLORID COMPLICATION(2) LIKE HAEMORRHAGE , OBSTRUCTION , PERITONITIS.MEDICAL OR SURGICAL INTERVENTION IS NOT REQUIRED FOR ASYMPTOMATIC JEJUNAL DIVERTICULOSIS,HENCE NO STRATEGY(3) WERE DEVELOPED TO MANAGE SUCH CASES.PREVALENCE IS 0.06 TO 1.3 % ON AUTOPSY(2).JEJUNUM LOCALISATION OF DIVERTICULUM IS LESS PREVALENT THAN DUODENAL AND ILEAL BUT WITH INCREASED CHANCE OF BEING COMPLICATED.MOST OF THE CASES DIAGNOSED AS A SURPRISE ON LAPAROTOMY OR DURING RADIOLOGICAL INVESTIGATION.SURGICAL EXPLORATION REMAINS THE STANDARD OF CARE IN COMPLICATED CASES.JEJUNAL DIVERTICULAS ARE THOUGHT TO BE ACQUIRED DIVERTICULAM (PULSION).HAVING SUCH ASYMPTOMATIC NATURE IN MAJORITY CASES CLINICAL RECOGNITION RELIES MOSTLY ON AWARENESS OF SUCH LESION AND HAVING A DIFFERENTIAL DIAGNOSIS IN MIND IN PATIENTS PRESENTING WITH SMALL BOWEL OBSTRUCTION, OCCULT GI HAEMORRHAGE.

CASE REPORT-

A 54 YR OLD DAILY LABOUR PRESENTED IN OUR EMERGENCY WITH GENERALISED PAIN ABDOMEN, WITH OCCASIONAL BILIOUS VOMITING FOR LAST TWO DAYS.HE IS HAVING FEVER AND CONSTIPATION FOR THE SAME DURATION.PHYSICAL EXAMINATION REVEALED TEMPARATURE OF 101 DEGREE FARHENHEIT,HEART RATE 110 BPM,BLOOD PRESSURE 108/68 mmhg. RESPIRATORY RATE 18 BREATHS PER MINUITE.ABDOMINAL EXAMINATION REVEALED GENERALISED ABDOMINAL TENDERNESS, REBOUND TENDERNESS POSITIVE.BOWEL SOUNDS WERE ABSENT.BLOOD BIOCHEMISTRY REVEALED INCREASED WHITE BLOOD CELL COUNT 16,600/dl, DERANGED RENAL FUNCTION.ABDOMINAL X-RAY FINDING WAS DILATED SMALL BOWEL WITH MULTIPLE AIR FLUID LEVEL IN STEP-LADDER FASHION.PLANNED EXPLORATORY LAPAROTOMY PERFORMED AFTER INITIAL RESUSCITATION WHICH IDENTIFIED BAND OBSTRUCTION IN THE PROXIMAL ILEUM WITH DEVITALISED SEGMENT.SURPRISINGLY MULTIPLE JEJUNAL DIVERTICULUMS NOTED(FIGURE 1,2).RESECTION ANASTOMOSIS OF UNHEALTHY SEGMENT PERFORMED AFTER THE BAND IS RELEASED.DIVERTICULAMS LEFT UNTREATED AS NOT CAUSING ANY PROBLEMS.

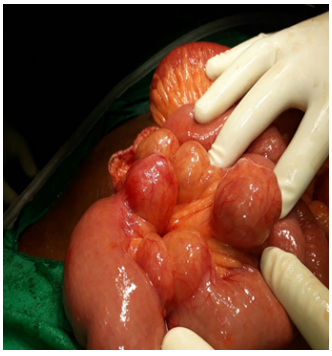

FIGURE 1

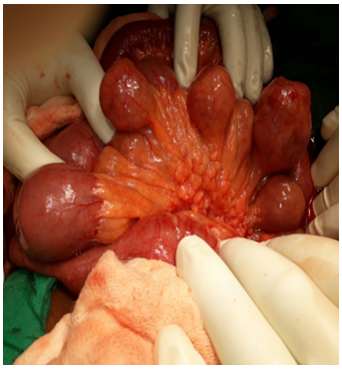

FIGURE 2

DISCUSSION-

IN 1794 SOMMERING FIRST DESCRIBED ACQUIRED JEJUNAL DIVERTICULOSIS AND SIR ASHLEY COOPER IN 1807 LATER ON.THESE ARE ACTUALLY HERNIATION OF MUCOSA AND SUBMUCOSA THROUGH MUSCULAR LAYER OF SMALL BOWEL, HENCE FALSE DIVERTICULAS PRESENT MAINLY ON MESENTRIC BORDER OF SMALL BOWEL.MOST COMMONLY AFFECTED ARE ELDERLY MALES,MOST COMMON LOCATION BEING PROXIMAL JEJUNAM (75 %), DISTAL JEJUNAM(20 %)

AND ILEUM (5 %).ASSOCIATED DIVERTICULAM MAY ALSO

PRESENT IN COLON (30 – 75 %), DUODENUM (15 – 42 %), OESOPHAGUS (2 %), STOMACH ,BLADDER.IT IS USUALLY A UNCOMMON DISORDER AND MOSTLY ASYMPTOMATIC.-HOWEVER IT SHOULD ALWAYS BE CONSIDERED AS A DIFFERENTIAL IN CASES OF UNEXPLAINED MALABSORPTION, WEIGHT LOSS , ANAEMIA, NON SPECIFIC CHRONIC PAIN ABDOMEN OR DISCOMFORT, OCCULT GASTROINTESTINAL HAEMORRHAGE.

RODRIGEZ et al. REVIEWED THE LITERATURE AND CONCLUDED MANY SYMPTOMS MAY BE MISDIAGNOSED AS DYSPEPSIA OR IRRITABLE BOWEL SYNDROME.IRON DEFICIENCY AND MEGALOBLASTIC ANAEMIA ARE OFTEN CONTRITED AS A RESULT OF MALABSORPTION DUE TO NON-SYNCHRONISED PERISTALTIC MOVEMENT,STASIS OF INTESTINAL CONTENT AND BACTERIAL OVERGROWTH(5).

CURRENT HYPOTHESIS AS ETIOPATHOGENESIS OF JEJUNAL DIVERTICULAM FOCUSED MAINLY ON SMOOTH MUSCLE AND MYENTRIC PLEXUS ABNORMALITIES. MICROSCOPIC EVALUATION REVEALS VISCERAL MYOPATHY AND NEUROPATHY LEADING TO DEGENERATION AND FIBROSIS OF SMOOTH MUSCLE IN AFFECTED SEGMENT INCREASES INTRALUMINAL PRESSURE LEADING TO HERNIATION(3).

UNFORTUNATELY THERE IS NO EFFECTIVE MEANS OF DIAGNOSING SUCH A CASE.HOWEVER MULTISLICE CT SCAN OF ABDOMEN MAY PROVE TO BE
USEFUL(4).

CONCLUSION-

JEJUNAL DIVERTICULOSIS IS A RARE FINDING WITH UNEVENTFUL COURSE IN MOST CASES PRESENT IN ELDERLY MALE.HOWEVER IT MAY LEAD TO SIGNIFICANT MORBIDITY AS REMAINS UNDIAGNOSED IN MOST CASES.WHEN PRESENT WITH COMPLICATION THE ONLY OPTION IS RESECTION ANASTOMOSIS WITH A SIGNIFICANT MORTALITY.

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