# INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

## A CASE REPORT OF JEJUNAL ADENOCARCINOMA

**Oncology**

| | |
|---|---|
| **Dr Shailesh Patel** | Assistant Professor, Gujarat Cancer And Research Institute,ahmedabad. |
| **Dr Ajay Kumar\*** | Assistant Professor, Gujarat Cancer and Research Institute,Ahmedabad. *Corresponding Author |
| **Dr Chirag Bhirud** | Third year Resident, Gujarat Cancer and Research Institute,Ahmedabad. |
| **Dr Sanket Desai** | Second year Resident, Gujarat Cancer and Research Institute,Ahmedabad. |

## ABSTRACT

Compared to rest of the gastrointestinal tract,small intestinal tumours are less common as they are only 3-6% of all gastrointestinal neoplasms. Most common small bowel adenocarcinoma is duodenal adenocarcinoma & jejunal adenocarcinoma is less common. As the patient with small intestinal tumours have no characteristic & alarming symptoms, patient presents to medical care facility in advanced stage & ultimately it proves harmful for the patient. We present a case report of jejunal adenocarcinoma where patient presented early & early treatment ensured him better result.

## KEYWORDS

### INTRODUCTION

Intestinal tumors make up 3-6% of all gastrointestinal neoplasms[1].The estimated annual incidence of malignant small bowel tumour is 0.3–2.0 cases per 100,000 persons[2] so it can be considered among rarest type of gastrointestinal tumours.The incidence of this tumour starts increasing after age 40 & incidence is relatively higher in 5th & 6th decade of life.Prognosis of this tumour strongly depends on the stage of tumour at presentation of the patient. Most common histological types are: carcinoid(35-42%) followed by adenocarcinoma(30-40%),lymphoma(15-20%) & sarcoma(10-15%)[3]. Location of small bowel adenocarcinoma in small bowel is most common in duodenum(57)% followed by jejunum(29%) & ileum(10%)[4].The symptoms on presenation can be with nonspecific abdominal symptoms like abdominal pain,nausea,vomiting or with gastrointestinal bleeding or with symptoms of intestinal obstruction.So the diagnosis can be missed in early stage & there may be delay in diagnosis by 6-10 months.Beacuse of lower incidence of this cancer, thera are no reliable screening methods developed.So it can lead to delayed diagnosis,advanced disease & ultimately poor prognosis.

### Case Summary

A 62 year old male patient came to out patient department with occasional colicky abdominal pain for 2 months, abdominal lump for 1 month, melena for 10 days with no complaints of anorexia,weight loss , hematemesis or any features suggestive of intestinal obstruction .Patient had diabetes mellitus type 2 for 3 years & was on oral hypoglycaemic drugs. Patient had no significant past/personal/family history.

On examination patient was moderately built & nourished with pulse rate 76/min,BP 136/84 mm hg with pallor & no cyanosis, icterus, clubbing, lymphadenopathy & edema.

On abdominal examination  inspection there was 3*3 cm lump in umbilical & left lumbar region,no visible peristalsis,no visible dilated veins,no movement with respiration

On palpation:   3.5*3 cm palpable lump in umbilical region & extending into left lumbar region no abdominal distension no ascites with umbilicus in normal shape, size & position

On investigation, patient presented with anaemia having haemoglobin 7.1 gm/dl.Rest of the blood investigations were within normal limit. Diabetes was under control.

CT scan of abdomen & pelvis plain & contrast s/o presence of mildly enhancing wall thickening involving bowel loop in periumbilical & in left lumbar region with fat stranding  noted in adjacent space suggestive of malignant involvement & presence of multiple nodes in mesentery paraaortic region & precaval region.Rest of the ct findings were normal.

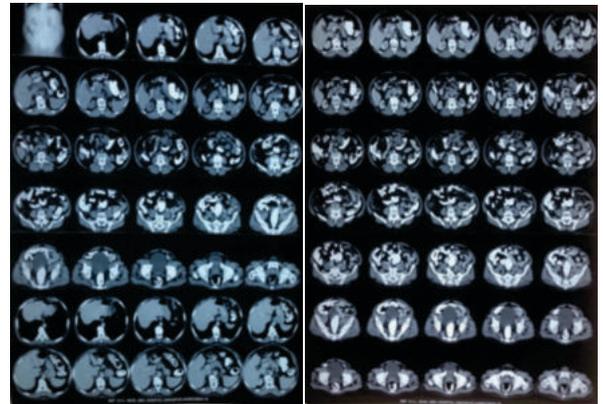**Image 1 & 2:Cect images of jejunal adenocarcinoma**



**Image 1**        **Image 2**

Trucut biopsy of the abdominal lump was done which was suggestive of adenocarcinoma.

Patient was transfused with 2 units of packed cell volume & hemoglobin was repeated which showed haemoglobin 9.6 g/dl & patient was planned for exploratory laparotomy.

On exploration there was no ascites or liver metastasis. Growth in jejunum approximately 15 cm distal to duodenojejunal flexure was identified.Growth was mobile with metastatic lymphadenopathy in regional mesentry.Growth was mobilized & segmental resection of jejunum was done.approximately 40 cm of jejunum was removed with 5 cm proximal & 5 cm distal jejunum with involved mesentry & jejunojejunal anastomosis was done.
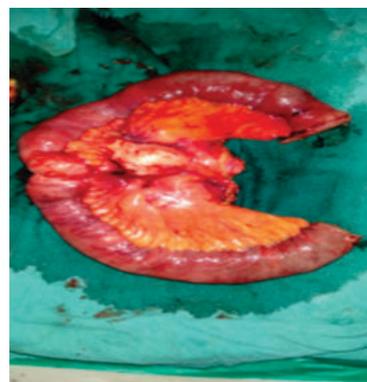


image 3:image of the specimen of jejunal tumour

Postoperative course of patient was uneventful & patient was discharged from hospital on postoperative day 7.

Histopathology & immunohistochemistry profile was done & the tumour was negative for synaptophysin,chromogranin & positive for CK7,CK20,AE1 so it favoured the diagnosis of adenocarcinoma & pathological staging was pT3N2a.The patient was given adjuvant chemotherapy in the form of capaecitabine+oxaliplatin 3 cycles.

## DISCUSSION

The incidence of small bowel tumour is rare compared to gastric & colorectal tumours.Though small intestine has 75% of the gastrointestinal tract length & 90% of the mucosal surface when it comes to incidence of tumour it is <2% of all gastrointestinal tumors[5].Small bowel tumor are more prevalent in western countries than Asian countries. Male gender & increasing age are associated with high incidence. Adenocarcinoma consists of 35-40% of all small bowel malignancy. It is difficult to diagnose in early stages because it is asymptomatic at that time. But as the disease progresses patient develops symptoms. But still the symptoms are nonspecific so it leads to diagnostic delay of 6-8 months. Most common type of presentation is with abdominal pain & weight loss. Rarely patient may present with bleeding or with intestinal obstruction. Nonspecific symptoms & inaccessibility of small bowel are important cause for diagnostic delay. The diagnostic modalities include CT scan, Barium contrast study & capsule endoscopy. Primary small bowel tumours cannot be accurately identified on CT. Barium study is standard for abnormality beyond duodenojejunal flexure but sensitivity is somewhat low. The mainstay of treatment is Surgical resection & if patient presents in early stage the chances of cure are higher. Because of late presenatation,the overall survival is poor but after curative surgical resection it can improve significantly. After carcinoid tumor,adenocarcinoma is second best histologic type with best survival rate as suggested by Talamonti et al[6].

## CONCLUSION

Because of the nonspecific clinical symptoms & lack of accurate diagnostic modality,diagnosis of small bowel carcinoma remains a challenge & requires high level of suspicion.As the prognosis of small bowel adenocarcinoma improves with early diagnosis & curative surgery,it mandates higher level of suspicion.Earlier diagnosis & early surgical intervention leads to good oncological outcome.

## REFERENCES

1. Haselkorn T, Whittemore AS, Lilienfeld DE. Incidence of small bowel cancer in the United States and worldwide: geographic, temporal, and racial differences. Cancer Causes Control. 2005;16:781–787. doi: 10.1007/s10552-005-3635-6.
2. Pan SY, Morrison H. Epidemiology of cancer of the small intestine. World J Gastrointest Oncol. 2011;3:33–42. doi: 10.4251/wjgo.v3.i3.3
3. Halfdanarson TR, McWilliams RR, Donohue JH, Quevedo JF. A single institution experience with 491 cases of small bowel adenocarcinoma. Am J Surg. 2010;199:797–803. doi: 10.1016/j.amjsurg.2009.05.037.
4. Neugut AI, Marvin MR, Rella VA, Chabot JA. An overview of adenocarcinoma of the small intestine. Oncology. 1997;11:529–536
5. Figueira-Coelho J, Lourenço S, Costa M, Mendonça P, Murinello A, Neta J. Blood loss anemia due to adenocarcinoma of the jejunum: case report and review of the literature. Cases J. 2009;2:6237. doi: 10.4076/1757-1626-2-6237
6. Bilimoria KY, Bentrem DJ, Wayne JD, Ko CY, Bennett CL, Talamonti MS (2009) Small bowel cancer in the United States: changes in epidemiology, treatment, and survival over the last 20 years. *Ann Surg* **249**: 63–71.