



**Overall Survival Benefit in Intrahepatic Cholangiocarcinoma with Rasayana Therapy –
A Case Report**

Yogesh Bendale, Vineeta Bendale, Poonam Birari-Gawande, Avinash Kadam and

Pravin Gund

Rasayu Cancer Clinic, Pune

Abstract

Despite of neoadjuvant concurrent chemoradiotherapy (CCRT), the outcomes of chemotherapy and radiotherapy for advanced-stage unresectable IHCC (Intra hepatic cholangiocarcinoma) remains unsatisfactory. This case report focuses on the clinical experience with Herbo-mineral Ayurvedic formulation in a patient with advanced unresectable intrahepatic cholangiocarcinoma. We have found the clinical potential of Rasayana therapy for use in combination with chemoradiotherapy.

Here, we present a case of 35 years old IHCC patient in advanced stage .In this case Rasayana therapy demonstrates overall survival benefit 14 months with improvement in quality of life against 9.3 months with chemoradiotherapy alone.

Key Words: - Intrahepatic Cholangiocarcinoma, Rasayana therapy, Ayurveda,

Introduction

Intrahepatic Cholangiocarcinoma (IHCC) is a cancer arising from the intrahepatic bile duct. It is the second most frequent type of primary liver cancer, after hepatocellular carcinoma. In this cancer day by day the incidence and mortality rate have been increasing, but its prognosis remains poor due to a lack of effective treatment options. Surgical resection is potentially curative in IHCC but most of the patients present at advanced unresectable stage. Hence, IHCC have dismal prognosis. A large observational study reported that the median survival of untreated patients with advanced-stage, unresectable IHCC was three months. To date, however, a treatment strategy for these patients has not yet been standardized.⁽¹⁾

We treated several cancer patients with exclusive Rasayana therapy or with combination of Rasayana therapy and chemoradiotherapy. Palliative Rasayana therapy with chemoradiotherapy has been found to prolong overall survival compared with chemoradiotherapy alone in IHCC. Rasayana therapy can be helped in management of cancer in many ways. There are various rasayana formulations available in ayurvedic classical text books. Rasayana preparations can act as an adjuvant or a co-therapy along with chemotherapy or radiotherapy. It can be helpful in targeted therapies as shown in various studies on nanoparticles of gold.⁽³⁾

Various clinical studies have proved the beneficial role of rasayana therapy on Cancer. It involves transformation, dysregulation of apoptosis, proliferation, invasion, angiogenesis and metastasis.^(2,3) Rasayana compounds are rich in anti-oxidants and have immunomodulatory, anti tumourogenesis, anti-inflammatory, anti angiogenic properties^(2,3) In this case on the basis of pathology of biliary tract cancer we selected herbo-mineral rasayana compounds which act on Hepato-biliary system with other symptomatic classical and proprietary Ayurvedic formulations according to table number 1.

Case Presentation

A 35 year's old female patient was presented with *h/o* progressively increasing jaundice associated with anorexia for one week. Patient was not having any history of abdominal pain, abdominal distension, GI bleed vomiting, altered bowel habits, dysphagia, fever, shortness of breath, decreased urine output or altered sensorium etc. With only complaints jaundice and anorexia she reported to outside hospital where she underwent diagnosis for exact cause of jaundice. She underwent for CECT abdomen (02.03.14) and MRI abdomen (05.03.14) – which revealed large intrahepatic mass lesion (9.7 x 8.4 x 8.6 cms) involving segment II, III, IV A, VIII & I suggestive of cholangiocarcinoma and abdominal lymphadenopathy. Occlusion of left portal vein, encasement of and mild narrowing of main portal vein and Occlusion of middle and left hepatic veins was seen. Her FNAC report was suggestive of moderately differentiated adenocarcinoma. She was a known case of hypothyroidism also. After that she was underwent procedure ERCP on 07.03.14 for common hepatic duct stricture – bismuth type –IV, biliary sphincterotomy was done and self expandable metallic wallnax stent placed. Her lab test CA - 19.9 values was increased. It was 325.6 u/mlc. Cytology report dated 13.3.14 was suggested neuroendocrine neoplasm.

As her serum Bilirubin had reduced, she was started on palliative chemotherapy on 3/4/14 with Gemcitabine & oxaloplatin. Her post chemo CT abdomen report dated 8/5/14 revealed 8x6.6x7.7 cm mass in segment IV A, II, III and I. It didn't show significant decrease in size after chemo. It seems to be resistant to Gemcitabine & oxaloplatin. She was also suffering from anorexia, loss of appetite, nausea, pain in abdomen and general weakness. Hence, Patient came to Ayurveda on 10/5/14 to get relief from symptoms. Her Weight was 54.7 kg.

Immediately we started anti malignant rasayana therapy on 15/5/14 for a month. After a month patient came for follow up with relief from symptoms. By seeing this response we continued treatment. The patient was absolutely stable for 12 months after starting rasayana therapy and was not having any physical complain. Her tolerability to chemotherapy was increased. She had tolerated six chemotherapy cycles well. Post six chemotherapy with two cycles of rasayana therapy i.e for four months PET scan (2/8/14) was done for evaluation of tumour size which revealed mild decrease in liver mass with decrease in size of mets in liver

nodules with resolution of most of them but no significant change in size of abdominal nodules. Oncologist advised to continue Gemcitabine. Further CT abdomen and pelvis dated 24/9/14 revealed segment II, IV, III of Liver lesions with largest lesion size 6.9x5.8 cm-with vascular involvement & lymph nodes. Her CA-19.9 dated 1/10/14 value also decreased up to 79.16. Hence, patient was put on radiotherapy. Further PET-SCAN dated 5/12/14 showed stable hepatic mass, the satellite lesion in segment VIII or metastatic lymph nodes.

Patient was almost symptom free till December. After that she was complaining of distension of abdomen. In December 2014, she had developed ascites. Her USG dated 27/12/14 revealed stable hepatic mass size with moderate ascites which was a new finding compared to the prior PET scan dated 5/12/14. Her Ascitic fluid cytology report dated 31.12.14 was negative for malignancy. Further we gave her purgative therapy for ascites with Ayurvedic formulation Icchabhedi Ras (classical Ayurvedic drug). She was almost stable till June 2015 followed by further progression of her disease. Her serum bilirubin gets increased up to 24.8 and she was expired on 27/7/15.

Table No-1 Treatment Details

| DRUG NAME | DOSE | FRQUENCY | ANUPAN |
|-------------------|--------|----------|------------|
| Navjeevan Rasayan | 125 MG | OD | Honey |
| Aarogyawardhini | 250 MG | BD | WARM WATER |
| Prawal panchamrut | 250 MG | BD | WARM WATER |
| Kamdudha Ras | 250 MG | BD | WARM WATER |
| Sutshekhar Ras | 250 MG | BD | WARM WATER |
| Kanchanar Guggul | 250 MG | BD | WARM WATER |
| Tapyadiloha | 250 MG | BD | WARM WATER |
| Kawach beej | 250 MG | BD | Honey |
| Hirak Rasayan | 125 MG | OD | Honey |
| Agni Rasayan | 125 MG | OD | Honey |
| Vrushya Rasayan | 125 MG | OD | Honey |
| Sindurbhushan Ras | 125 MG | OD | Honey |
| Chintamani Ras | 125 MG | OD | Honey |

Outcomes

- Tumor Regression –In this case partial tumour response with beneficial effects was seen in combination with chemotherapy.
- Symptom Management- After starting rasayana therapy patient had shown improvement in appetite, food intake, sleep, and feeling of well-being which could elicit the action of herbo-mineral compounds on hepatic-biliary system. Her abdomen pain also under controlled. Effective palliation of ascitic fluid was seen with purgation therapy without any adverse effects. She was socially, physically active till almost 20 June 2015. Significant improvement in four domains of quality of life was shown.
- In this case patient showed better tolerability to chemotherapy
- Increased Overall Survival- Patient survived 14 months after his Initial Diagnosis against the median survival of untreated patients with advanced-stage, unresectable IHCC was 3 months
- Efficacy of Antimalignant rasayana therapy was seen even in advanced IHCC.

Discussion

Intrahepatic cholangiocarcinoma is most dreadful disease among all cancers. Survival rates for IHCC are poor. Resectable rates are quite low because of presentation of disease in advanced stage. New advances in this cancer are limited and treatment of the disease remains a major challenge.

Many experimental studies showed Ayurvedic rasayana therapy is beneficial in treating cancers. Rasayana compounds possess antitumor,immunomodulatory ,noneytotoxic,antiangiogenic,antioxidant properties. It induces apoptosis. Many in- vitro and

in-vivo studies showed its efficacy in treating various types of cancers like colon cancer, hepatic cell carcinoma, leukemia etc. ^(4, 5)

The Ayurvedic compounds were selected so as to support and restore the normal functions of the hepatic-biliary system and to relieve patient symptoms. It mainly includes Navjeevan Rasayana-a proprietary herbo-mineral medicine (Swarna Bhasma – Bhasma (Calx) of Gold, Hirakbhasma-calcinoid diamond, Abhrak Bhasma, -calcined Mica, Tamra Bhasma-Calcined Cooper, Kutki etc.) with other medications as per Table no-1.

Suvarna bhasma (calcinoid gold) is main ingredient of Antimalignant rasayana which have been used in Ayurveda from several years for rejuvenation and revitalization and also many experimental studies showed its efficacy in various disorders and cancer. It possesses enormous potential to improve the efficacy of cancer treatment. ⁽³⁾

In above present cases patient came to us in very advanced metastatic disease stage. In this case we observed that Ayurvedic rasayana therapy is good palliative treatment in advanced stage of cancer. After starting rasayana therapy patient had shown improvement in appetite, food intake, sleep, and feeling of well-being which could elicit the action of herbo-mineral compounds on digestive, hepatic-biliary system.

Antimalignant rasayana therapy was well tolerated and was associated with longer progression free survival (PFS) and overall survival (OS) than chemotherapy alone in unresectable advanced IHCC.

Despite of neoadjuvant concurrent chemoradio therapy researchers found PFS 1.9 months with chemotherapy and 4.3 months with chemoradiotherapy and OS 6.2 months with chemotherapy only and 9.3 months with both therapies. ⁽¹⁾

In this present case rasayana therapy demonstrates overall survival benefit of 14 months with improvement in quality of life and excellent symptomatic relief against 9.3 months with chemoradiotherapy alone.

References

- 1) Kim et al.: Outcomes of concurrent chemoradiotherapy versus chemotherapy alone for advanced-stage unresectable intrahepatic cholangiocarcinoma. *Radiation Oncology* 2013 8:292.
- 2) R.B. Patil & R.R. Gayal: Rasayana A Multidimensional Therapy: A Review. *IAMJ*: Volume 2; Issue 4; July-August-2014:433-439.
- 3) Soumen Das et al. *Swarna Bhasma* in cancer: A prospective clinical study. *Ayu*. 2012 Jul-Sep; 33(3): 365–367.
- 4) Sharma T, Rawal G. Role of ayurveda in tumorigenesis: A brief review. *Int J Green Pharm* 2012; 6:93-101.
- 5) Li L¹, Leung PS². Use of herbal medicines and natural products: an alternative approach to overcoming the apoptotic resistance of pancreatic cancer. *Int J Biochem Cell Biol*. 2014 Aug; 53:224-36. doi: 10.1016/j.biocel.2014.05.021. Epub 2014 May 27.