

To study the effectiveness of carica papaya 30 in functional dyspepsia in age group of 20-60 years: a case series

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Abstract:

Background: Functional Dyspepsia refers to group of upper gastrointestinal symptoms that occur commonly in adults. Globally, its prevalence has been noted to vary between 11% - 29.2%. Carica papaya an Indian homeopathic drug is indicated in enlarged liver and spleen with fever, dyspepsia and indigestion as it contains tocopherols, carotenoids, and benzyl isothiocyanate. It contains antioxidant, antibacterial, anticancer activity, anti-fertility agent, anti-inflammatory, antiulcer, antidiabetic, hepatoprotective properties due to the presence of phenolics, flavonoids, and alkaloids as key phytochemicals.

Objective:

Primary Objective: To study the role of Carica papaya in Functional Dyspepsia.

Secondary Objective: To find out the most common age group.

To find out the most frequent ailment.

Material & Method:

Study Design: Case Series

Setting: Motiwala (National) Homoeopathic Medical College & Hospital, Nashik OPD

Duration of Study: 6 Months.

Sampling Technique: Convenient Sampling.

Methodology: 45 cases diagnosed with functional dyspepsia were enrolled and prescribed Carica papaya 30 with repetition as per requirement . SFLDQ Score was used to evaluate the cases at baseline and end of study.

Result: Among 45 patients, 42 patients (93%) improved, 2 patients (5%) were dropped out and 1 patient (2%) didn't improve. Highest number of patients were from 20-30 years with 31%, 31-40 years with 7%, 41-50 years with 5% and 51-60 years with 2%. The most common ailments were 27% with dietary factors, 27% with improper habits, 23% with sleeping habits, 18% with lifestyle changes and 5% with NSAIDs consumption.

Conclusion: Carica Papaya was effective in reducing the severity of the symptoms of functional dyspepsia in age group of 20-60 years.

Key Words: Functional Dyspepsia, Carica Papaya, Homoeopathy.

Introduction:

The term dyspepsia is derived from the Greek language and it literally means Bad Digestion^{1&2}. Functional dyspepsia (FD) is one of the most common disorders of upper gastrointestinal tract. Functional dyspepsia is a chronic digestive condition that includes feelings of prolonged indigestion without a clear structural cause^{3&4}. It is synonymously known as Idiopathic, Essential or Non-ulcer dyspepsia. Functional dyspepsia refers to heterogeneous disorders typified by upper abdominal pain without the presence of an ulcer⁵. As principle of homeopathic medicine produces similar symptoms of diseases, hence it works as immunomodulator or immunoregulator to improve condition of person having over sensitized immune system⁶. Homoeopathy treats condition permanently, correcting immune response of body. Carica papaya is very efficacious in patients with weak digestion. It is best adapted in dyspepsia and indigestion with weakness and other concomitant symptoms⁷. Carica Papaya is also indicated in enlarged liver and spleen with fever, dyspepsia, and indigestion and weakness. Pains in hepatic region, complications of liver, jaundice, conjunctiva yellow, tongue coated white, intolerance of milk, even a small quantity causes indigestion and pain in the hepatic region⁸.

Methodology:

45 cases of Functional Dyspepsia (age 20-60 years) were enrolled, evaluated and prescribed Carica Papaya. Short form Leeds dyspepsia questionnaire (SFLDQ) was used to evaluate the cases at baseline and end of study.

Inclusion Criteria:

Patient of age group 20-60 years and of both sexes.

Any case comprising of one or more of the following symptoms (ROME III Criteria)⁹:

- a) Post-prandial fullness which was an unpleasant sensation like the long persistence of food in the stomach.
- b) Early satiation, which was a feeling of overfilling of stomach in spite of little food intake.
- c) Epigastric pain.
- d) Epigastric burning which was expressed as sensation of heat.

Exclusion Criteria:

- a) Patients having Organic Gastrointestinal diseases.
- b) Patient having IBS (irritable bowel syndrome).
- c) Severe psychiatric disorders.
- d) Patients with malignancies.
- e) Pregnant and lactating females.
- f) Patients refusing to participate.

Study Instruments/ Data Collection Tool:

Short-Form Leads Dyspepsia Questionnaire (SF-LDQ)¹⁰

Statistical Analysis:

Comparison of Pre & Post Score of SFLDQ Scale

	Mean	Std. Deviation	Std. Error Mean	Mean diff	SD of diff	T value	P value of paired t test
Pre-Score SFLDQ	18.62	3.09	0.46	9.89	0.553	17.89	0.0001
Post Score SFLDQ	8.73	3.49	0.52				

Result:

45 patients were enrolled in our study, out of which 42 (93%) patients who were regular in their follow-ups showed improvement in symptoms, 2 patients (5%) were dropped out due to irregular follow up and 1 patient (2%) was not improved with the treatment. The most affected age group by functional dyspepsia were among 20-30 years with 31% frequency, 31-40 years with 7% frequency, among 41-50 with 5% frequency and among 51-60 with 2% frequency. The most common distribution of ailments found in 45 patients were observed as 27% were affected due to dietary factors, 27% again we're affected due to improper habits, 23% due to Sleeping Habits, 18% due to lifestyle and 5% due to frequent intake of NSAIDs.

Effectiveness of Carica Papaya:

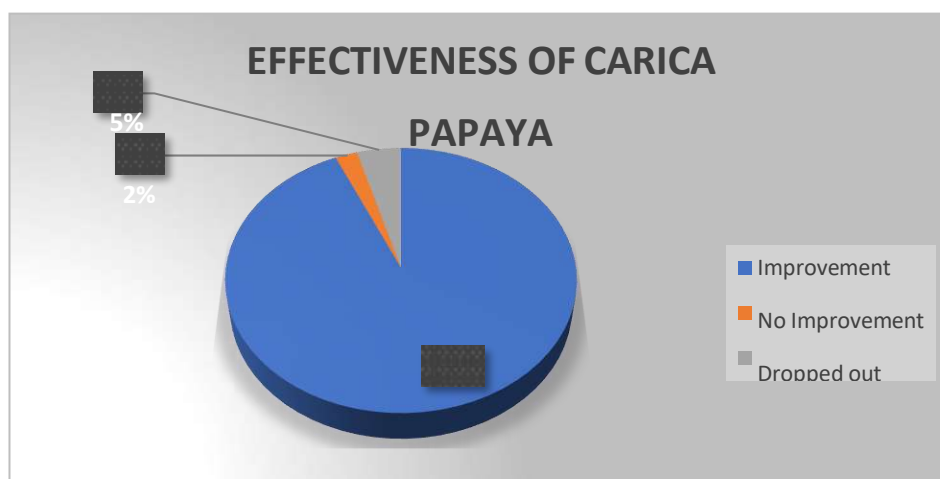


Fig. No. 01

Age Wise Distribution:

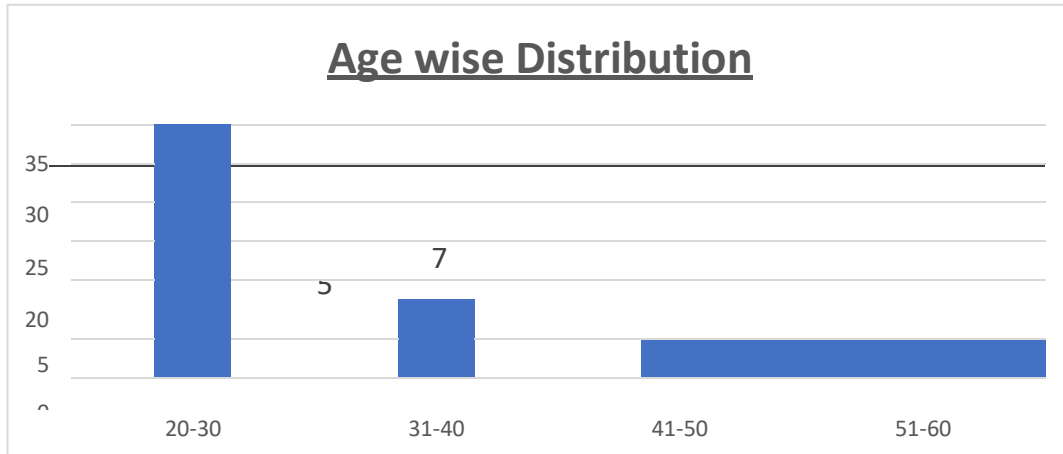


Fig. No. 02

Distribution of Ailments:

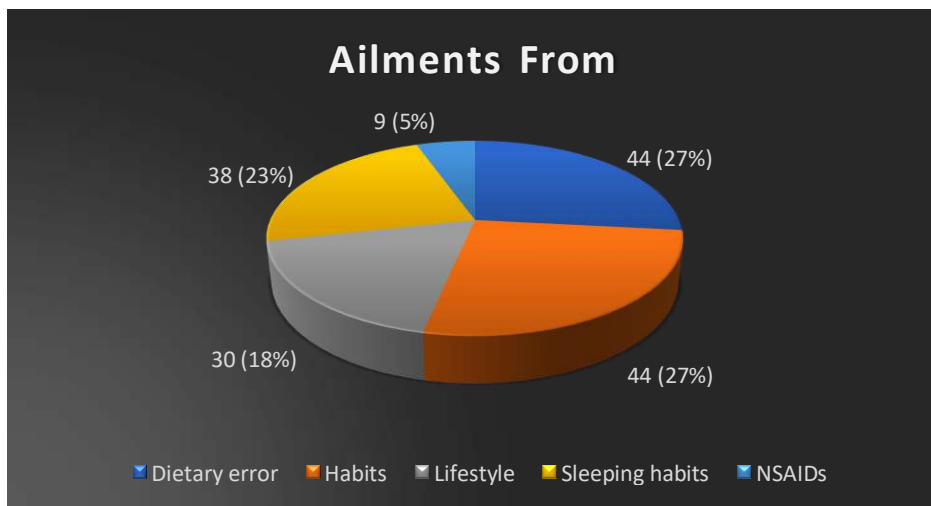
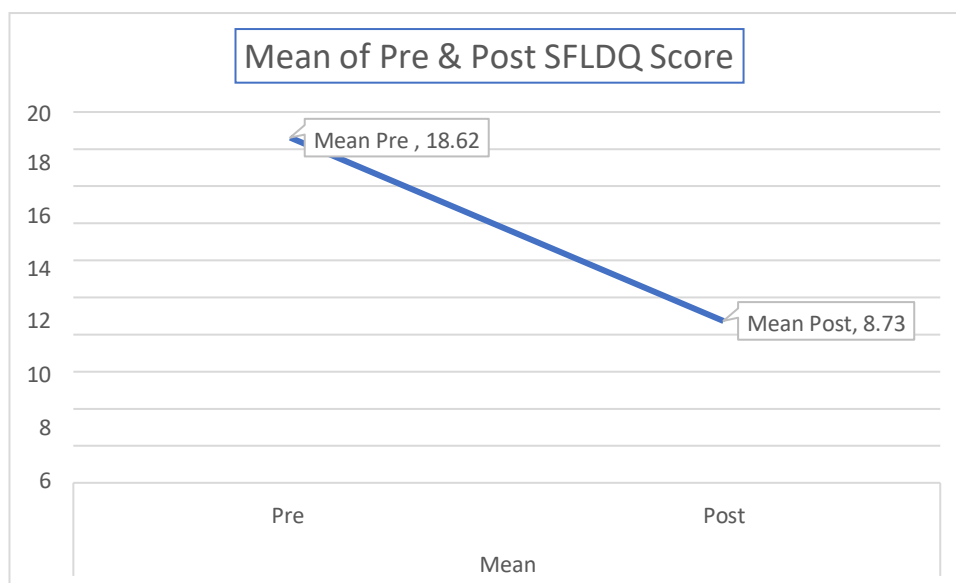


Fig. No. 03

Mean of Pre & Post SFLDQ Score:**Fig. No. 04****Discussion:**

Functional (non-ulcer)¹¹ dyspepsia is highly prevalent disorder. However, unfortunately, there is no permanent cure for the majority of patients because of many reasons such as worries, bad food habits, poor lifestyle, impure and contaminated food stuffs¹² and many more and the available treatment relieves symptoms in only a proportion of patient¹³. Free radical causes many chronic health problems. Antioxidants can help us by preventing the formation of free radicals. Research is going on to find new sources of antioxidants of natural origin which are safe and economically viable. According to a study hexane fraction of *Carica Papaya* male flower shows a good antioxidant activity¹⁴. The activation of the brain-gut axis includes the release of catecholamines mediated by the autonomic nervous system and stress hormones by the hypothalamus–pituitary–adrenal axis to activate the gastrointestinal response^{15&16}.

We have studied the effectiveness of *Carica Papaya* in the age group 20-60 years from the study setting at M(N)HMC OPD. For this dissertation work we used several tools such as Boericke's *Materia Medica*, Murphy's repertory, Harrison's *Manual of medicine*, Davidson's principles and practice of medicine.

We studied 45 patients for the duration of 6 months. Out of 45 patients who were enrolled in our study, 42 patients (93%) who were regular in their follow-ups showed improvement in symptoms, 2 patients (5%) were dropped out due to irregular follow up and 1 patient (2%) was not improved with the treatment. There was marked significant difference seen in the mean of the score before and after i.e., 18.62 to 8.73 respectively (Fig.no.4). The two tailed p value is less than 0.0001. By the conventional criteria, this difference is considered to be highly statistically significant.

The most common distribution of causation (Fig.no.3) found in 45 patients were observed as 27% were affected due to dietary factors, 27% again we're affected due to

improper habits, 23% due to Sleeping Habits, 18% due to lifestyle and 5% due to frequent intake of NSAIDs.

The age wise distribution (Fig.no.2) which was mostly affected due to functional dyspepsia were among 20-30 years with 31% frequency as majority of the cases collected were from this age group, among 31-40 years with 7% frequency, among 41-50 with 5% frequency and among 51-60 with 2% frequency. The objective was to find out the effectiveness of Carica Papaya in functional dyspepsia by reducing severity of symptoms in the age group of 20-60 years which was compellingly fulfilled with this study.

Furthermore, research is required to study the effectiveness of other such rarely used remedies in day-to-day practice and to avoid frequent usage of antacids.

Conclusion: Carica Papaya 30 an Indian Homoeopathic Medicine when prescribed for functional dyspepsia was effective in reducing the severity of the symptoms in age group of 20-60 years.

Declaration of patient's consent: The authors certify that; they have obtained all appropriate patient consent forms.

Further Research: Many more Indigenous drugs should be proved to know their hidden clinical utility.

Conflict of interest: The author declares no conflict of interest.

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