Observational study on Barium Meal X-Ray in clinically diagnosed cases of *Parinama Shoola*

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**ABSTRACT**

*Parinama Shoola* is a disease of *Annavaha Srotas* (GIT) characterized by pain during digestion of food which torments the process after every meal time and source of constant discomfort. It is a *Pitta Pradhana Tridoshaja Vyadhi*. Based on subjective features most of the Ayurvedic scholars considered as peptic ulcer, one of the most common digestive system disease rise due to the faulty diet and habits. Hence in the field of gastroenterology diagnosis and management of shoola plays a vital role. The present era is an era of new inventions and the modern medical science has stuck the mind of all by its day to day developments. It is true that modern medical science has grown up considerably; still it has to face a big question mark in so far as some miserable problems are concerned. The problem selected for this work is one among them. Considering the solemnity and incidence of the disease, the present study was aimed to observe barium meal X-ray findings in clinically diagnosed cases of *Parinama Shoola* to evaluate objective features for *Parinama Shoola*. It was observed that among 60 patients of *Parinama Shoola*, 30% were having deformed duodenal bulb, in 25% duodenal cap is deformed with mucosal erosion and 13.3% had duodenal ulcer found with ulcer crater in upper GI barium meal X-ray.

**Key words:** *Parinama Shoola*, Barium Meal X-Ray, Deformed duodenal bulb.

**INTRODUCTION**

*Parinama Shoola* is a Durvigneya (difficult to manage) and *Pitta Pradhana Tridoshaja Vyadhi* characterized by pain during digestion of food which torments the process after every meal time and source of constant discomfort.¹ Shoola is the presenting and the most troublesome symptom in all the disease of *Annavaha*

This description signifies that *Shoola* is as horrible as that of *Trishoola* of Lord Shiva. It is a chronic disorder approximately 25 millions. Indian's are suffering from peptic ulcer disease at some point in their lifetime. Duodenal ulcers are 5 to 10 times more common than gastric ulcers; the incidence for duodenal ulcer is 30-60%. The male and female ratio is 3:1 the incidence of gastric ulcer is usually 50% and over. It affects male and female in the ratio of 2:1 each year. There are 50,000 to 85,000 new cases of peptic ulcer disease and more than 1 million ulcer related patients were hospitalized.² Its prevalence in India particularly South India is quite high, recent studies suggests approximately 50% of adults at some times of their lives get affected by peptic ulcer, Considering the solemnity and incidence of the disease, the present study was aimed to observe upper GI X-ray (barium meal) findings in clinically diagnosed cases of *Parinama Shoola*.
AIMS AND OBJECTIVES

Evaluation of Upper Barium meal X-ray findings in clinically diagnosed case of Parinama Shoola.

MATERIALS AND METHODS

A total of 60 patients having the clinical features of Parinama Shoola were selected for the study irrespective of sex, occupation, religion and socio-economical status from OPD & IPD of Shri. J.G.C.H.S Ayurvedic Medical College Hospital, Ghatprabha, A special proforma were prepared with detail history taking, physical examination, signs and symptoms as mentioned in classics.

Study design

It is an observational clinical study on 60 patients of either sex diagnosed as Parinama Shoola based on clinical features. After that patients were subjected to Upper barium meal X-ray for the evaluation of objective findings for Parinama Shoola.

Inclusion Criteria

- Patients having the classical sign and symptoms like Jeeryate Yath Shoolam (epigastric pain during digestion), Aadhma Na (abdominal fullness), Atopa (bloating), Arati (restlessness), Trushna (thirst), Daha (burning sensation in epigastrium), Chardi (vomiting), Hrullasa (nausea).
- Age group between 16 - 60 years.

Exclusion Criteria

- Annadrava Shoola and Amlapitta.
- Parinama Shoola associated Upadrava (Other systemic disorders).

Diagnostic Criteria

Patients are diagnosed clinically on the basis of signs and symptoms of Parinama Shoola.

Duration of the study

Since this is an observational study, patients were kept under observation until fulfillment of objectives.

Assessment Criteria

Assessments were done based on subjective and objective criteria.

Subjective Criteria

- Jeeryate yath shoolam
- Aadhma Na
- Atopa
- Arati
- Trushna
- Daha
- Chardi
- Hrullasa

Objective Criteria

- Upper GI Barium X-ray

OBSERVATION AND RESULTS

Total 60 patients were diagnosed as Parinama Shoola for the study and they were subjected for Upper Barium meal X-ray, the results of different observations are cited in below tables.

Overall assessment of subjective parameter

Among 60 patients, 100% were having Jeeryate Yath Shoolam and Daha, 70% were having Arati, 30% were having Hrullasa, and followed by 8.3% patients were having Adhmana, Atopa, Trishna, and Chardi each.

Table 1: Showing overall assessment of subjective parameter in 60 patients

<table>
<thead>
<tr>
<th>Subjective parameter</th>
<th>No. of patient</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeeryate Yat Shoolam</td>
<td>60</td>
<td>100%</td>
</tr>
<tr>
<td>Aadhma Na</td>
<td>5</td>
<td>8.3%</td>
</tr>
<tr>
<td>Atopa</td>
<td>5</td>
<td>8.3%</td>
</tr>
<tr>
<td>Arati</td>
<td>42</td>
<td>70%</td>
</tr>
</tbody>
</table>
Critical analysis of subjective parameter

In the present study among 60 patient, 24 were diagnosed with Jeeryate Yath Shoolam, Daha, and Arati (40%), 18 patient were diagnosed with Jeeryate Yath Shoolam, Daha, Arati and Hrullasa (30%). 8 patient were diagnosed with Jeeryate Yath Shoolam along with Daha and Chardi (13.3%). 5 patient were diagnosed with Jeeryate Yath Shoolam, Daha and Trishna (8.3%). 5 patient were diagnosed with Jeeryate Yath Shoolam along with Daha, Adhmana and Atopa (8.3%).

Table 2: Showing critical analysis of subjective parameter in 60 patients

<table>
<thead>
<tr>
<th>Critical analysis of subjective parameter</th>
<th>No. of patient</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeeryate Yat Shoolam + Daha + Arati + Hrullasa</td>
<td>18</td>
<td>30%</td>
</tr>
<tr>
<td>Jeeryate Yat Shoolam + Daha + Charti</td>
<td>8</td>
<td>13.3%</td>
</tr>
<tr>
<td>Jeeryate Yat Shoolam + Daha + Adhmana + Atopa</td>
<td>5</td>
<td>8.3%</td>
</tr>
<tr>
<td>Jeeryate Yat Shoolam + Daha + Trishna</td>
<td>5</td>
<td>8.3%</td>
</tr>
<tr>
<td>Jeeryate Yat Shoolam + Daha + Arati</td>
<td>24</td>
<td>40%</td>
</tr>
</tbody>
</table>

Parinama Shoola vs Barium meal X-Ray

Among the 60 patients in the present study it was observed that, 31.6% had normal findings, 30% had deformed duodenal bulb 25% had duodenal cap deformed with mucosal erosion, 13.3% had duodenal ulcer found with ulcer crater.

Table 3: Showing Parinama Shoola vs Barium meal X-Ray in 60 patients

<table>
<thead>
<tr>
<th>Barium meal findings</th>
<th>No. of patient</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal findings</td>
<td>19</td>
<td>31.6%</td>
</tr>
<tr>
<td>Deformed duodenal bulb</td>
<td>18</td>
<td>30%</td>
</tr>
<tr>
<td>Duodenal cap is deformed with mucosal erosion</td>
<td>15</td>
<td>25%</td>
</tr>
<tr>
<td>Duodenal ulcer found with ulcer crater</td>
<td>8</td>
<td>13.3%</td>
</tr>
</tbody>
</table>

Discussion

Parinama Shoola is a Pitta Pradhana Tridoshaja Vyadhi of Annavaha Srotas characterized by pain during digestion of food. It is not mentioned in any of the Brahatryi. But Madhava has considered Parinama Shoola as separate clinical entity and describes in detail including its Nidanapachaka, Bheda, Sadhyasadhya and Upadravas. After the study it was observed that, among 60 patients, 100% were having Jeeryate Yath Shoolam and Daha, 70% were having Arati, 30% were having Hrullasa, and followed by 8.3% patients were having Adhmana, Atopa, Trishna and Chardi each and 31.6% were shows normal findings in barium X-ray, 30% were deformed duodenal bulb, 25% were duodenal cap is deformed with mucosal erosion and 13.3% were duodenal ulcer found with ulcer crater.

Conclusion

In this study the radio graphic evidence of upper GI Barium meal shows the changes similar to that of Peptic Ulcer i.e. deformed duodenal bulb, duodenal cap is deformed with mucosal erosion and duodenal ulcer found with ulcer crater. So it can be concluded that, deformed duodenal bulb, duodenal cap is deformed with mucosal erosion, duodenal ulcer found with ulcer crater can be considered as objective
parameters in the diagnosis of Parinama Shoola and clinical features of Parinama Shoola as subjective findings of Peptic ulcer. Hence Barium meal may be considered as supportive diagnostic tool in diagnosis of Parinama Shoola.

REFERENCES


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