Clinical Trial with Gasex and Diarex for Bowel Preparation

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INTRODUCTION

Amongst the commonest causes of poor Roentgenograms of the abdomen are faecal matter, gas or air in the gastrointestinal tract. So all X-rays of the abdomen, lumbosacral spine, I.V.P. etc. should be done after proper bowel preparation to eliminate intestinal gases or air and faecal matter.

It was with this end in view that at the Indira Gandhi Medical College and General Hospital, Nagpur, we conducted a trial using Gasex and Diarex tablets (both of Himalaya) along with Bisacodyl, a laxative which is used routinely.

MATERIAL AND METHODS

In the present study the efficacy of Gasex and Diarex, along with Bisacodyl for bowel preparation, was evaluated between January and March 1984 on 100 cases.

These cases included both outdoor and indoor patients, attending the Radiology Department for barium enema, I.V.P., plain X-ray abdomen (KUB) and the lumbar spine. They were of both sexes and aged between 15 and above 60 years. Only those patients thought to be suffering from intestinal obstruction or severe ulcerative disease of the colon and uraemia were excluded from the trial.

The bowel habits were grouped as follows:

(a) Normal bowel habits
(b) Chronic constipation
(c) Loose motions and history of amoebiasis

The patients in the above groups were given the following drug combinations:

**Group I**: Normal bowel habits
- Gasex, 2 tablets t.i.d. for 3 days
- Bisacodyl 3 tablets, HS for 1 day

**Group II**: Chronic constipation
- Gasex, 2 tablets t.i.d. for 3 days
- Bisacodyl, 3 tablets HS for 2 days

**Group III**: Loose motions (irritable bowel habit and with history of amoebiasis)
- Gasex, 2 tablets t.i.d. for 3 days
- Diarex, 2 tablets t.i.d. for 3 days
- Bisacodyl, 3 tablets HS for 1 day.

Patients were instructed to take the doses 3 days prior to the investigation.

All the patients were kept on a low residue diet and were advised to refrain from unnecessary swallowing before the X-ray examination.
All patients were called at 8 a.m. on the day of X-ray examination. They were asked to put on cotton garments, unstarched, while coming to the Department. Every patient was asked about side-effects of the medicaments, if any.

The X-rays were reviewed and the following points observed.
1. Detail, density and contrast of the film
2. Faecal residue in the colon
3. Gases in the colon and intestines
4. Psoas shadow visualised or not
5. Outline of kidney shadow visualised or not.

Roentgenograms were interpreted as belonging to one of these three categories:
1. Excellent: No residual faecal material identified, few gases in the intestines. Psoas shadow and renal shadow well visualised.
2. Acceptable: Faecal material in the caecum or single small collection of faecal material elsewhere in the colon. Psoas shadow and renal shadow not visualised.
3. Unsatisfactory: Colon loaded with faecal material, gases in the abdomen, Psoas shadow and renal shadow not visualised.

OBSERVATIONS AND DISCUSSION
The following observations are noted in the Tables given below:

In Group I, kidney shadow was visualised in 30 cases (65.2%) while gas clearance was seen in 36 (78.2%).

In Group II, gas clearance was seen in 22 cases (57.8%) and kidney shadow in 19 (50%).

In Group III, gas clearance was seen in 10 patients (62.5%) and kidney shadow visualised in 7 (43.7%).

<table>
<thead>
<tr>
<th>Table 1: Showing the No. of patients and percentage incidence of clearance of faeces, gas, visualisation of Psoas shadow and renal shadow.</th>
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<tbody>
<tr>
<td><strong>Group I</strong> (Normal bowel habits)</td>
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<tr>
<td>Total No. of cases</td>
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<tr>
<td>Faeces clearance</td>
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<td>Gas clearance</td>
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<td>Psoas shadow visualisation</td>
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<td>Renal shadow visualisation</td>
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As shown in Table 2, in Group I excellent bowel preparation was obtained in 60.8%, acceptable bowel preparation in 26.08% and unsatisfactory in 13.04%.

Group II patients had excellent preparation in 57.8% and acceptable preparation in 34.2%, while 7.8% experienced unsatisfactory results.

And Group III showed 56.2% of cases having excellent bowel preparation, 25% acceptable and 18.7% unsatisfactory results.
We did not encounter any side-effects in Group I and Group II patients. Only in Group III, 2 patients complained of nausea and slight abdominal discomfort.

| Table 2: Showing the No. of patients and percentage incidence of results in each group |
|---------------------------------|-----------------|-----------------|-----------------|
| Category                        | Excellent       | Acceptable      | Unsatisfactory  |
| Group I (Normal bowel habits)   | 28 (60.8%)      | 12 (26.08%)     | 6 (13.04%)      |
| Group II (Chronic constipation) | 22 (57.8%)      | 13 (34.2%)      | 3 (7.8%)        |
| Group III (Loose motions)       | 9 (56.2%)       | 4 (25.0%)       | 3 (18.7%)       |

This study of 100 cases was undertaken (1) to assess the efficacy of Gasex and Diarex for bowel preparation, which is a must prior to many of the radiological investigations like I.V.P., barium enema and routine X-ray of the abdomen (KUB) and lumbar spine and, (2) to note side-effects if any.

CONCLUSION
Gasex and Diarex, which are prepared from indigenous herbal ingredients, proved to be more effective and economical than the routine preparations used, i.e. various enzymes + laxatives. They are easy to administer and have practically no side-effects. Gasex and Diarex along with Bisacodyl work better in the preparation of the bowels.

ACKNOWLEDGEMENT
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REFERENCES